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MAKING THE GRADE

The Development Report Card For the States

March 1987

THE CORPORATION FOR ENTERPRISE DEVELOPMENT
with
MT. AUBURN ASSOCIATES
and
INSTITUTE ON TAXATION AND ECONOMIC POLICY

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Robert E. Friedman
President
The Corporation for Enterprise Development
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Prologue

Even as Congress debates the question of how to make the American economy competitive again, the answers are already emerging in State Houses throughout the country.

In the struggle to overcome the human and economic damage caused by the last recession and adapt to the rapid restructuring of the global economy, states have developed a new formula for creating and sustaining economic vitality -- a formula which echoes many of the themes that were central to the founding of our nation and that spurred its rapid rise to international economic prominence: the entrepreneurial spirit, freedom of opportunity, belief in the individual and the community, investing in and building for the future, providing for an educated populace, partnerships, and more. This new formula is reshaping the economic landscape and rendering useless and outdated the old formula for measuring the "business climate" of states:

- Where the old formula pit state against state in frenzied efforts to attract footloose factories, the new formula emphasizes strengthening the chief sources of new jobs and wealth -- the state's own existing businesses and potential entrepreneurs.

- Where the old formula was obsessed with cutting wages, benefits, regulations, taxes, and unions, the new formula emphasizes investment -- in education, training, infrastructure, technology, amenities and other sources of development capacity -- to build international competitiveness.

- Where the old formula saw government as the enemy, the new formula sees government as a partner responsible for building the basic foundations of the economy.

But while states across the nation have revolutionized the business of "economic development," the means by which we rate the vitality and attractiveness of states -- indexes based on the old notion of "business climate" -- have not changed.

Until now. This report, the first in an annual series, presents the *Development Report Card For the States*, a new yardstick for measuring the economic health of each of the fifty states in the Union and for exploring their ability to generate sustained and widely shared growth. It is designed to serve the interests not of those outsiders who would sit in judgment but of those inside the states who are trying to move ahead.

Why do we need a new index? Because the old definition is irrelevant and destructive. Because it measures the cost of everything and the value of nothing. Because in the life and death struggle for economic competitiveness our, future depends on getting the formula right. Because the entrepreneurs who stake their fortunes and their futures on an idea need to know where that idea is most likely to come to fruition. Because in a world of limited financial resources we need to know what works, if only to avoid costly mistakes. Because the quality of people's lives is defined by the rate at which our economy expands and the extent to which the benefits of that expansion are widely and equitably shared.

Introduction

"Business Climate." No economic issue is more hotly debated in state legislatures, county councils and local chambers of commerce than the "business climate" -- the extent to which an area is perceived to be hospitable to new business. Having a "good business climate" is both the fondest wish of state and local economic development officials and the source of almost constant political heartburn. In the pursuit of this holiest of Holy Grails, state, county and local governments spend hundreds of millions of dollars each year in tax abatements and other inducements which (they have been persuaded) will make them more attractive to industry. No one wants to be seen as unfriendly to new industry.

Thus it is that each June, state and local officials await, with fear and trepidation, the release of the premier "business climate" rating: the *Annual Study of General Manufacturing Climates of the Forty-eight Contiguous States of America* published annually by the Chicago-based accounting firm Grant Thornton (formerly Alexander Grant & Company). Using "22 factors selected by manufacturers as important to business success," Grant Thornton ranks each state, from first to forty-eighth, according to its alleged "attractiveness" to business.

The newspapers love it. Officials in states that score high love it too, and so do their advertising agencies, which immediately crank out ads trumpeting the state's score. Officials in states that score low try to ignore it, but they know that eventually it will be used by some company that has expressed a desire to locate in the state but is looking for"sweeteners" to offset the state's "poor business climate."

But let's be fair. If a state is insensitive to the needs of business, if it evidences no desire to create an environment conducive to growth, why shouldn't it be criticized? And if a state is doing a good job of strengthening its economy and making it possible for businesses to grow and prosper, it should get some credit for its efforts. All Grant Thornton does is give credit where credit is due, right?

Wrong. If the Grant Thornton index measures the factors "important to business success," why is it that the states with the highest employment growth in 1985 -- a reasonably direct measure of "business success," after all -- rank lowest on the 1986 index? And why do states that actually lost jobs in 1985, rank at or near the top?

If the Grant Thornton index measures what is "important to business success," why do Massachusetts, Maryland and Rhode Island -- states with among the lowest unemployment rates in the nation -- show up in the bottom of the index?

Why do states with the highest income growth end up near the bottom of the list, while states with little or no growth end up at the top?

Why is it that states that Grant Thornton says have "poor" business climates generate the highest numbers of patents issued per capita -- a key measure of how innovative a state's economy is -- while those listed as having "good" business climates generate few if any new patents?

Why is it that the states at the top of Grant Thornton's hit parade, states like South and North Dakota and Mississippi, trail the rest of the states in new business incorporations, while states with high rates of new business incorporation rank -- you guessed it! -- near the bottom of the list?

The reason is simple. The Grant Thornton index does not measure the factors "important to business success" in today's economy. The index, and the traditional "business climate" definition it perpetuates, are relics from another time, another economy -- an economy based on routine mass production where cheap, low skilled labor is the key to success.

But we don't have that economy anymore. Instead, businesses today compete in a global economy in which entrepreneurship, rapid development and application of technology, identification of niche markets, and the flexibility to custom-craft products and services to the needs of individual customers and markets are, increasingly, the keys to success. Competing in this new economy demands an entirely new set of private and public actions and investments -- a new economic environment -- that the old definition of "business climate" is simply too narrow and incomplete to measure.*

The Corporation for Enterprise Development's *Development Report Card For The States*, presented for the first time in this report, provides a more accurate and more comprehensive picture of how state economies are doing in today's economy and, thus, how "attractive" they *really* are for business development.

State economies are a bit like constellations. It's hard to get a "picture" of what the constellation looks like unless you can see all the stars that compose it -- and even then the "picture" is imprecise. The fewer stars you can see, the harder it is to understand the constellation. What's wrong with the traditional definition of "business climate" is that it focuses on only one small part of the state economic constellation and, in addition, addresses a lot of other things that aren't even in the constellation.

The *Development Report Card* is designed to help see the outlines and parts of state "economic constellations", and evaluate how they are doing. Some of the factors are easy to see -- bright stars -- and others are more obscure -- dim stars -- but *all* need to be examined if we are to get an accurate reading.

The *Development Report Card* is not intended to encourage people outside a state to sit in judgment, but rather to provide people and policymakers within a state with a tool for making progress. No one likes getting low grades, and no one with high grades should feel complacent in this economy. Like school report cards, this one is intended to identify areas where greater *individual* effort is desirable and useful.

Because every state's economy is different and every business has different growth requirements, this system abandons the traditional single numerical ranking in favor of four different indexes that go a long way toward characterizing more completely the vitality and attractiveness of state economies. The system was developed from an extensive analysis of both the building blocks of development and the obstacles to growth: taxation, industrial location, entrepreneurship, service sector growth, high technology, foreign investment, labor-management relations, unions, workers' compensation, capital market operations, infrastructure investment, plant closings and disinvestment, environmental regulation, and more. More than a hundred studies which considered the actual investment decisions of thousands of businesses were reviewed. The research was guided by a technical advisory board composed of economists and representatives from business, labor, government and community development organizations.

Chapter One of this report describes the fundamental changes that have reshaped the nation's economy and explains what we need to measure in order to create a reasonably accurate picture of individual state economies and their prospects for economic development.

Then, Chapters Two through Five present the details of the four indexes that comprise The Corporation for Enterprise Development's *Development Report Card*, and the summary results from applying them to the states.

Chapter Six describes, by way of conclusion, what the *Report Card* means for the states and the people who live in them.

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* The inadequacies of Grant Thornton's index are analyzed in detail in *Taken For Granted: How Grant Thornton's Business Climate Index Leads States Astray,* published by The Corporation for Enterprise Development in 1986, and are not repeated in this report.

Finally, Appendices provide:

- Tables displaying in detail the results of applying each of the measures in all four indexes to the fifty states.
- A detailed discussion of the methodology used to create this *Report Card*, including a candid assessment of the limits of the data used and the strengths and weaknesses of each of the indexes.
- A brief listing of the background literature reviews conducted to produce this *Report Card*.
- A bibliography.

WARNING

Even with this new, more comprehensive system, we still do not have a perfect picture of state economies -- though this system is a quantum leap beyond anything heretofore available. One reason we lack clear pictures is that although the economy has changed dramatically in recent years, the way we collect information about it has not. There are no easy measures, for example, of "opportunity." Many of the indicators of economic well-being in today's economy can only be approached indirectly, through the use of "proxies" which, we note quite candidly, are less than ideal. Some of the most important measures -- like the quality of life in a community -- simply cannot be addressed adequately at this stage. Some measures are too dated to use; as it is, this *Report Card* will not generally reflect changes which occurred in the last year.

The important thing, however, is that this system at least recognizes the importance of these measures -- however difficult they may be to pin down -- in any rigorous, realistic and relevant attempt to characterize state economies. Where proxies are available, we use them. Where they are not, we say so and indicate how we intend to correct the problem next year. When we have no idea how to measure effectively a given characteristic, we say so.

Better to face the challenge of international economic competitiveness equipped with some of the tools for success and *risk* failure than to pretend the challenge does not exist and *guarantee* failure.

Chapter One: Taking the Measure of State Economies

We stand at a new industrial divide, as revolutionary in its impact upon familiar economic landmarks as the first Industrial Revolution. In the old economy -- the economy in which the United States was the undisputed champion -- large, vertically integrated industries applied labor, capital and raw materials to manufacture a dizzying array of products for rapidly growing domestic, and international markets. Competition from other countries was limited; the United States was the dominant or sole producer of most of the goods and services produced and consumed here.

In today's economy, industries that might best be described as internationally-integrated apply these same inputs, now gathered globally, to produce even more sophisticated products -- and, increasingly, services. In many of these industries, the brute strength of human labor has been replaced by technology -- a higher value and, in the long run, a cheaper input. In other industries where people are still required to perform routine tasks -- like assembling computers and inspecting microchips -- these industries seek labor wherever in the world it can be obtained at lowest cost.

To a significant extent, America's "competitiveness crisis" -- and such associated problems as our high unemployment and international debt -- arose because we were slow to recognize that the old economy was being eclipsed. Suddenly, 75 percent of the things we produce are subject to international competition -- and not simply by "copycats," but by foreign companies which are producing goods and services more innovative, technology-intensive and valued than our own.

What's more, the changes underway in the global economy are accelerating. While we struggle with the unemployment caused by the flight of routine, low-skilled jobs to countries where wage rates are low, our competitors have already realized that the "big money" comes not from the end of the product cycle, where large numbers of low-paid workers assemble mass-produced products, but closer to the beginning of the cycle, where research, ingenuity and risk capital come together to create new products and services that are better than those already being produced, or that are so ingenious that they create entirely new market demand.

In short, our economy has changed. The mix of businesses that drive our economy has changed. The nature of work itself has changed, along with the factors that define "being competitive": an educated and adaptable workforce, long-term capital investment, the development and application of new technologies and management techniques, government commitment to nurturing new businesses, and entrepreneurship. The tools we once used to spur economic growth no longer work very well, and in some cases actually weaken state economies. Not surprisingly, the yardsticks we once used to measure the success of those tools no longer measure what is important to economic growth.

Asking the Right Questions

If we want to take the measure of a state economy, gauge its vitality and conduciveness to new business, we need to ask some very basic questions about what makes it "tick." At the most basic level, what makes an economy "tick" is people.

People work in order to obtain the elements of what they perceive to be "a better life." For the officials who worry about economic development, the challenge is to help assure that opportunities for people to obtain a better life are expanding and can be shared by everyone. But we can't ask everyone whether they feel they have such opportunities, so to get a picture of how successful people are at achieving a better life -- that is, how successful economic development is -- we need a few measuring tools. The question is, which tools?

If you wanted to know whether people were succeeding at obtaining a better life, something which inevitably costs money, you might want to check whether their income was sufficient to meet their basic needs. You'd also want to know whether their income was growing or not, keeping up with the cost of living or not. You'd want to know whether they could achieve their dreams.

Since the way most people obtain income is through work, you'd probably want to know something about their jobs. Are there enough jobs to go around? If jobs exist, do people have the skills to qualify for them? Does everyone have a fair chance of obtaining a job if they're qualified? Do the jobs pay enough to meet people's needs? Are they reasonably secure jobs with a future or are they threatened by change? Do people have the opportunity and the skills they need if, for whatever reason, they want to change jobs?

Since businesses create jobs, and most of the new jobs created in any state economy come from the businesses that are already there, you'd probably want to know something about what kind of businesses there are in the state and how they are doing. Are they growing or shrinking? What determines whether they will succeed or fail? Are they doing the things within their power to ensure their own success?

And since a lot of other things influence the success of businesses -- and therefore people's ability to obtain a better life -- what else is happening in that economy that will affect its capacity to meet people's needs? Who are the other players? Are they keeping up their end of the bargain?

Finally, there are qualitative questions. When people are happy with their community, their work, and their lives, what are the components of that happiness? How do you gauge the quality of their lives? And when businesspeople talk about places they feel are "good for business" these days, what do they mean? What are the components of that condition?

What's Wrong with the Old "Business Climate" Definition

The problem with the traditional definition of "business climate," and any index based upon that definition, is that it is largely irrelevant in today's economy. It *may* have been useful in the old mass production economy, though even that is arguable, but it has almost nothing to do with current economic conditions. In short, it does not address the right questions.

A state is said to have a good business climate if corporations considering locating branch plants in the state are made to feel "welcome." The conclusion we are meant to draw is that when businesses are made to feel welcome, economies will thrive and people will have a better life. But do they?

This "welcomeness" traditionally combines low taxes, low wage levels, minimal or no unionization, low or leniently-enforced regulation, and low public spending, with a willingness to provide tax abatements, preferential financing rates, regulatory exemptions, provision of land and often physical plant, and other facility siting "sweeteners."

The idea is to get that branch plant -- or whatever industry is being courted -- into the state before someone else makes a lower bid. You do whatever it takes, pay whatever it costs, to get those jobs. A state with a "good business climate" doesn't try to distinguish between high-paying jobs and low-paying jobs, between growth that widens income disparities and growth that narrows them, between growth that provides short-term benefits at the expense of long-term costs and growth that will strengthen the economy of the state for a long time to come. A state with a "good business climate" doesn't ask itself whether a business so footloose that it can be lured to the state by tax abatements won't become footloose again when those abatements end. A state with a "good business climate" is not concerned about the inherent inequity of providing special incentives to outsiders and expecting home-grown industries -- the principal source of new jobs in any economy -- to pay the freight.

States that score high under the traditional "business climate" definition keep taxes low, trading off investment responsibilities in road and rail maintenance, water and sewer systems and the like for the chance that a manufacturer might be attracted by the low taxes. They keep state investments in human services, job training and education low for the same reason. They strive to keep workers' compensation and unemployment benefits down. State-supported research is minimized. Environmental, health and safety standards are delayed and, once finally established, go unenforced so as not to antagonize industry.

Quite apart from the equity questions raised by this approach to economic development, a key question raised by the traditional business climate definition is: *What kind of economy do you get if you follow this formula?*

What you get is an economy based heavily on industries at the very tail end of the product cycle, where all labor functions are routine and education and skill requirements are low, and where least-cost production, determined primarily by tax and wage rates, is the primary goal. What you get is the Koreanization of industry. What you get is the economy of Singapore. Or Taiwan.

Scoring high on an index based upon this formula is a public declaration that you have a Third World economy. Indexes that emphasize these factors are not indexes of economic attractiveness, they are indexes of economic impoverishment.

The fundamental flaw of the traditional "business climate" definition is simply that it applies to economic circumstances that, for all intents and purposes, no longer exist in the United States. Because it addresses the wrong questions, it tends to deliver the wrong answers. In fact, a recent study found that the level of a state's manufacturing employment and profits varies *inversely* with its ranking on the Grant Thornton index.[1]

But if the traditional "business climate" definition does not address the health of state economies or their attractiveness to today's businesses, what would? Before we can choose yardsticks we need to be clear about what we want to measure -- that is, we need to be clear about what is important in today's economy.

What's Important in Today's Economy

There are clues to what is important in today's economy in the shift that has occurred in the factors businesspeople now look for when they consider starting, expanding or moving a business. While many state officials are still preoccupied by "business climate" issues, businesspeople themselves are way ahead of them. With evidence all around them that the economy is changing, they have a new list of the things that are important to their businesses. A study conducted a few years ago by the Harvard-MIT Joint Center for Urban Studies asked manufacturers to identify which location factors they considered "musts." State-controlled business costs -- key elements in the traditional business climate definition -- didn't even make the list. And the labor rate, while it was cited by 30 percent of the respondents, was far behind such factors as "proximity to markets," "attractive place for engineers and managers to live'" and "proximity to supplies, resources." The same study found that plant relocations were an insignificant source of new employment for states and that, even in those rare cases where new branch plants were being developed, fewer than 15 percent received tax abatements or concessions of any kind.[2]

What mattered to these businesspeople -- and what matters in today's economy -- were direct government services like road, sewer and other infrastructure investments; an educated workforce backed by effective labor training programs, and coherent environmental regulations. Such programs were cited twice as frequently as all forms of financial aid taken together.

If state economies no longer revolve around abundant supplies of cheap routine labor and a "look the other way" regulatory environment, what *do* they require? What do these clues mean?

For the answer, we have to understand what it means to be "competitive" in today's economy.

In a global economy where the equipment and facilities for routine, standardized mass production can be set up wherever in the world the wage rates are lowest, states seeking expanding economic opportunities have to look elsewhere for a competitive edge. No state can successfully underbid labor rates in the Philippines or Taiwan, and few states really want to. But in the face of high unemployment, virtually no measurable economic growth, a steadily increasing national debt and fierce competition for markets, what *can* states do to increase the competitiveness and vitality of their economies?

Increasingly, the businesses that are succeeding in today's economy are those producing technology-intensive products and services that are changing so quickly that they are obsolete before they can be routinely mass-produced by an overseas, low-wage competitor. The businesses that are succeeding also include those capable of producing products and services tailored to the specifications of narrow niches in the market and even to individual customers.

The common-denominator for all of these industries is *ideas* -- research, inventiveness, and ingenuity in the creation of new products and services or in the adaptation of old ones, and the flexibility and agility to continually improve and revise those products and services to meet rapidly changing market demands.

And these characteristics are not limited to those businesses we normally think of as "high-tech." Several recent studies have shown conclusively that the computer-related industries that usually fall into that category will provide only a small percentage of the new jobs we will need in the future.[3] More important is the successful application of these characteristics in even our most basic industries -- in the highly-competitive special ized steel mills, in the increasingly technology-enhanced durable goods manufacturing industries, in financial services, and so on. The competitiveness of these and other industries -- and the economic vitality of the economies of which they are a part -- rests upon the rapid development and application of new ideas.

What does this kind of economy require? What will make it more vital, more competitive, more successful at providing businesses and the people who work in them with expanding, shared opportunities for a better life?

In a worldwide economy where innovation, flexibility, resilience, and adaptability are the keys to business success, the strength of a state's economy -- and the welfare of people who make up that economy -- depends upon our ability to develop and make full use of the talents of all of the people who are part of that economy; upon our willingness to invest in and maintain the business and industrial infrastructure that forms the foundation of the economy; upon long-term investments in education and research; upon strengthening businesses, large and small, that already are a part of that economy; and upon the development of new partnerships between the private and public players in the economy.

If you want to measure what is "important to business success" in today's economy, *this* is what you have to measure.

Measuring State Economies

Taking the measure of this economy, however, is not a simple undertaking. Every state's economy is different and every business's requirements for growth are different. How would we recognize a state with an economic environment supportive of business development under today's competitive conditions if we saw one? What are the reference points of a state's "economic constellation" that, when seen all at once, would give us, if not a complete picture, then at least the general shape of the economy and an indication of whether it was a good place for businesses to grow?

We can "see" the general shape of a state's "economic constellation" by the answers to four questions:

1. How well is the state's economy *performing* its job of providing people the opportunity for a better life?
2. How *vital* are the businesses that compose the state's economy?
3. What is the state's *capacity* for expanding growth and opportunity?
4. What *policies* has the state established to help foster business growth and economic opportunity?

These four factors -- Performance, Business Vitality, Capacity and Policies -- are the indexes that form the basis of the *Development Report Card*. The measuring tools used in each of these indexes are introduced below and described in detail in the following four chapters.

The Performance Index

With the possible exception of bankruptcy lawyers and auctioneers -- the undertakers of the economy -- few businesses are interested in expanding or locating in an area that is dying economically. Business development is not an end in itself, but a means to an end. Thus, the bottom-line measure of how an economy is doing and whether it is a good place for businesses to grow is its current performance -- that is, whether it is providing people real opportunities for a richer and better life.

It seems so obvious that it is nothing short of astonishing that the traditional definition of "business climate" ignores completely this most basic measure of economic strength and attractiveness.

The Performance Index incorporates five sub-indexes:

1. *Employment* (including employment growth, the unemployment rate, the duration of unemployment, the status of displaced workers);
2. *Income* (earned income per capita, income change per capita, percent below the poverty line);
3. *Job Quality* (number of working poor, hourly earnings, job-related deaths, health coverage);
4. *Equity* (the distribution of income, black income as a percentage of white income, AFDC benefits as a percentage of per capita income); and
5. *Quality of Life* (doctors per capita, life expectancy, and infant mortality).

The Business Vitality Index

No firm, no industry can survive forever unchanged. Indeed, in a rapidly changing, globally competitive economy, survival for a business depends upon its ability to constantly seek and develop new products, services, production processes and markets. Survival for an economy depends upon its ability to spawn new firms, foster the expansion of young small firms and ensure innovation in large mature firms.

Thus, the "attractiveness" of an economy is determined, in part, by how businesses already within that economy are doing. We can determine something about the vitality of a state's economy by documenting the dynamism of businesses of all sizes and at all stages in their life cycle. Moreover, if we can measure their resilience, market strength, diversity and rate of investment, we can begin to get a picture of how competitive they are.

The Business Vitality Index includes two subindexes:

1. *Competitiveness* (international exports, manufacturing investment per production worker, percent of high growth companies, and presence of Fortune 1000 corporation headquarters); and

2. *Entrepreneurial Energy* (business formation rates, self-employment rates, and minority and women business ownership).

The Capacity Index

If you are a businessperson interested in either creating, expanding or relocating a business, three of the most important factors determining if you'll decide to build that business will be the availability of labor (appropriately trained workers, technicians, and managers), the accessibility of financial capital, and the adequacy of the basic infrastructure essential to economic growth -- roads, water, sewer and so forth. In short, you'll want to know whether that economy has the *capacity* to support your business needs. A good place to grow or locate a business has these resources available. A bad place to grow a business doesn't.

These are crucial needs for economic development. It's hard to make someone feel welcome when you have nothing to offer. The great irony of the traditional "business climate" definition is that it penalizes those states which provide for these needs (through tax-supported capital budgets and education and training programs, among others) and rewards those states which do not. At the top of the list are those states which make no investment in their capacity to support economic development; at the bottom are those that do.

Any state's capacity to support economic development and make businesses feel welcome is based on two things: its stock of human, natural and capital resources and infrastructure; and how it uses and enhances that stock of assets.

The Capacity Index incorporates four subindexes (human capital, financial capital, infrastructure and amenities) and each subindex measures several key indicators:

1. *Human Resource Capacity*

    (a) *Labor Force Skills and Educational Quality* (college education attainment, high school graduation rate, public expenditures per pupil, teacher/pupil ratios, and net migration of college students);

    (b) *Technological Innovation and the Pool of Innovators* (scientists and engineers as a percentage of work force, physical science and engineering doctoral degrees awarded, patents issued per thousand residents, university and federal research and development spending); and

    (c) *Entrepreneurial Awareness* (content analysis).

2. *Financial Resource Capacity*

    (a) *Capital Resources* (commercial bank deposits per capita; dividend, interest, and rent income per capita; venture capital); and

    (b) *Capital Utilization* (loans-to-equity ratio, commercial and industrial loans per nonagricultural employee).

3. *Physical Infrastructure* (transportation system capacity, sewage treatment plant capacity, airport capacity).

4. *Amenities* (doctors per capita, state arts agency appropriations, foundation grant funds).

The Policies Index

One of the few things about which Republicans and Democrats consistently agree is that success in today's economy depends upon new partnerships between private industry and public policymakers. They may differ on the details, but not on the general rule. The reasons are several. Perhaps the simplest is that neither government nor private industry can *afford* to go it alone anymore -- the needs are too great and the investments too big. While campaign rhetoric may emphasize "getting government off our back" or the evils of "big business," it is clear that government and business need each other. But there are more subtle reasons as well. Economic development, by its very nature, has both private and public dimensions. Businesspeople want their businesses to grow. Public officials want to ensure that growth expands and that its benefits are widely and equitably shared.

For practical reasons, if not for ideological ones, there is increasing public agreement that if the old maxim "that government which governs best, governs least" isn't entirely accurate, then perhaps "that government which governs best, governs thoughtfully" is closer to the mark. Increasingly state governments and private industry are working in partnership to achieve economic development objectives that they are unable to achieve singly.

A private market economy is, after all, private. There are some things that, by definition, it can't do (like providing for the unemployed, or spurring certain kinds of investment or development). Those are public responsibilities. Moreover, there are some things that a private market economy does imperfectly (like assuring clean air or water, or providing sufficient capital to certain kinds of enterprises, or guarding against prejudice, or assuring adequate investment for things that have very long-term payoffs like public education). That's why we have governments -- to equalize the distribution of the benefits (and costs) of the economic pie in some cases, and to expand the pie in others.

The roles that state governments play in economic development are several: as *broker*, bringing together private actors who have common goals; as *catalyst*, creating economic outcomes through leadership or incentives; as *investor*, particularly where private investment fails, as in education and public works, but also through direct investment; as *regulator* to ensure that public interests are protected in private economies; and as *stabilizer* offsetting the negative human effects of swings in the fortunes of private markets, as in the case of cyclical employment programs.

Recently, state governments have become active partners in economic development, devising an imaginative array of policies and programs explicitly designed to improve the vitality of their economies and to create the conditions for business growth. The range of initiatives is so broad, however, that no index could successfully calibrate them. Moreover, no two states are the same and, thus, not all policies and programs make sense in every state. Consequently, this Policies Index gathers the initiatives into nine broad categories and, rather than attempting to weigh and rate states in terms of each type of policy or program, simply addresses whether they do or do not exist in that state. The rationale is simple: states that have such programs, however they are organized, present a more welcome environment for economic growth -- and a greater likelihood that their residents will have opportunities to achieve a better life -- than states that do not.

The Policies Index gathers state economic development policies and programs into seven categories:

1. *Improving Governance and Regulation*;
2. *Creating an Effective and Equitable Tax Code*;
3. *Mobilizing Capital*;
4. *Enhancing Technology and Business Development*;
5. *Building and Maintaining Public Works*;
6. *Investing in Human Resources*; and
7. *Helping Distressed Communities.*

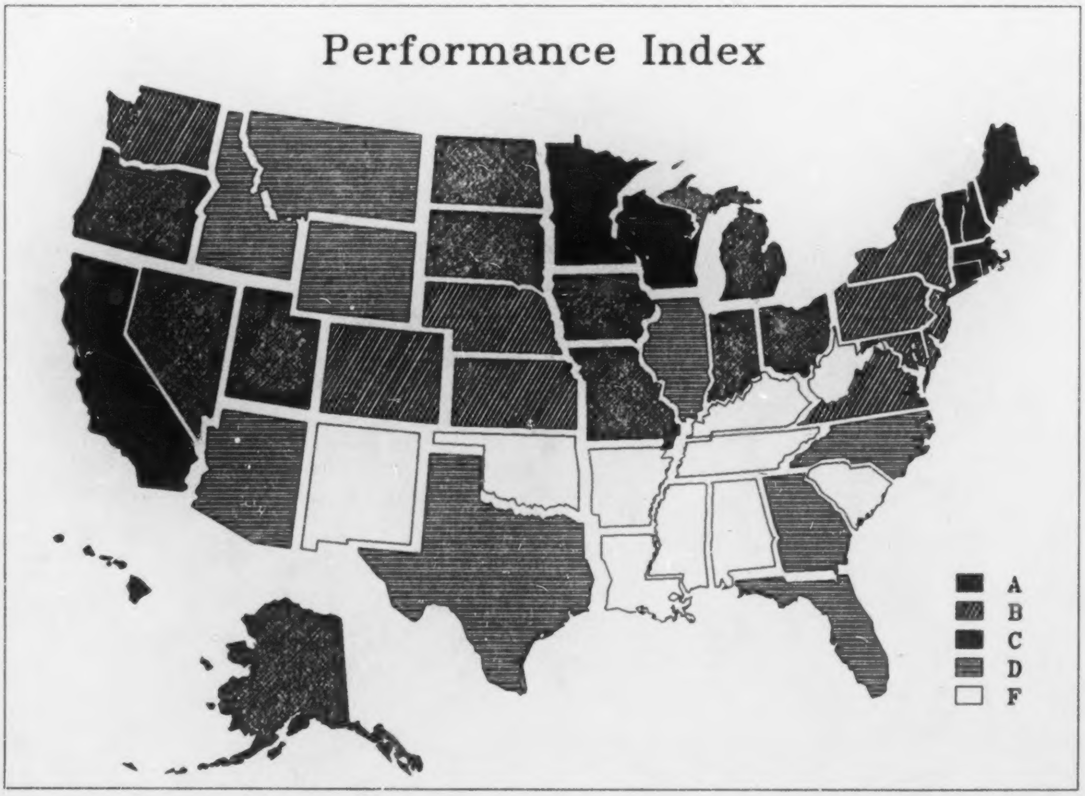
These four indexes -- Performance, Business Vitality, Capacity and Policies -- do *not* perfectly illuminate the economies of the states or flawlessly illustrate their respective conduciveness to business and economic growth. But they *do* provide a coherent overall picture of these conditions. Specifically, they both identify and measure with reasonable accuracy those factors crucial to achieving the purpose of economic development in today's economy: creating expanding opportunities for all of us -- workers, technicians, managers and entrepreneurs alike -- to achieve a better life.

1. See Paul N. Courant and George A. Fulton, "What Do Business Climate Studies Have to Do with Business?" Institute of Public Policy Studies Discussion Paper No. 243, University of Michigan, 21 November 1985; and Paul D. Warner and Lawrence A. Weiser, "An Assessment of Business Climate Studies," paper prepared for the Seventh Conference on the Small City, Stevens Point, Wisconsin, March 1986.

2. Roger Schmenner, "Location Decisions Of Large Firms: Implications For Public Policy," *Commentary*, January 1981.

3. Council of Economic Advisors, *Annual Report* (Washington, D.C.: U.S. Government Printing Office, 1984).

Chapter Two: The Performance Index


Performance Index
A
B
C
D
F

Performance Index Report Card

	Employment Subindex		Income Subindex		Job Quality Subindex		Equity Subindex		Quality of Life Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	36	D	42	F	44	F	43	F	41	F	48	F
Alaska	25	C	11	B	24	C	16	B	47	F	23	C
Arizona	4	A	30	C	35	D	40	D	29	C	32	D
Arkansas	33	D	38	D	46	F	47	F	19	B	43	F
California	18	B	11	B	13	B	23	C	20	B	9	A
Colorado	12	B	8	A	34	D	30	C	25	C	20	B
Connecticut	13	B	3	A	6	A	6	A	17	B	2	A
Delaware	5	A	7	A	16	B	36	D	34	D	16	B
Florida	8	A	18	B	45	F	43	F	37	D	37	D
Georgia	7	A	25	C	39	D	47	F	48	F	39	D
Hawaii	31	D	24	C	14	B	5	A	12	B	10	A
Idaho	35	D	45	F	32	D	18	B	8	A	32	D
Illinois	48	F	15	B	3	A	29	C	44	F	34	D
Indiana	34	D	35	D	10	A	9	A	25	C	22	C
Iowa	46	F	37	D	19	B	28	C	2	A	29	C
Kansas	18	B	20	B	27	C	17	B	14	B	15	B
Kentucky	41	F	41	F	40	D	37	D	31	D	46	F
Louisiana	47	F	48	F	36	D	50	F	50	F	50	F
Maine	16	B	14	B	26	C	3	A	5	A	5	A
Maryland	11	B	5	A	12	B	31	D	45	F	18	B
Massachusetts	10	A	1	A	8	A	8	A	12	B	1	A
Michigan	44	F	32	D	2	A	7	A	43	F	25	C
Minnesota	26	C	10	A	20	B	2	A	4	A	4	A
Mississippi	40	D	49	F	48	F	49	F	39	D	49	F
Missouri	28	C	26	C	21	C	34	D	21	C	28	C
Montana	38	D	46	F	36	D	15	B	15	B	36	D
Nebraska	31	D	19	B	29	C	11	B	3	A	13	B
Nevada	17	B	17	B	18	B	26	C	46	F	24	C
New Hampshire	1	A	2	A	22	C	20	B	9	A	3	A
New Jersey	24	C	4	A	4	A	25	C	31	D	11	B
New Mexico	28	C	47	F	50	F	35	D	23	C	43	F
New York	36	D	8	A	1	A	10	A	37	D	12	B
North Carolina	14	B	29	C	30	C	42	F	41	F	38	D
North Dakota	27	C	33	D	49	F	19	B	1	A	26	C
Ohio	49	F	22	C	6	A	31	D	29	C	30	C
Oklahoma	21	C	42	F	42	F	38	D	34	D	41	F
Oregon	43	F	38	D	11	B	23	C	22	C	30	C
Pennsylvania	44	F	22	C	9	A	11	B	18	B	18	B
Rhode Island	9	A	13	B	15	B	21	C	16	B	7	A
South Carolina	22	C	40	D	43	F	41	F	49	F	47	F
South Dakota	20	B	42	F	47	F	13	B	7	A	26	C
Tennessee	39	D	33	D	30	C	45	F	36	D	43	F
Texas	15	B	26	C	41	F	46	F	40	D	40	D
Utah	6	A	36	D	36	D	22	C	11	B	21	C
Vermont	3	A	26	C	33	D	13	B	6	A	8	A
Virginia	2	A	6	A	23	C	39	D	33	D	17	B
Washington	30	C	20	B	17	B	4	A	23	C	14	B
West Virginia	50	F	50	F	28	C	27	C	27	C	42	F
Wisconsin	41	F	16	B	5	A	1	A	9	A	6	A
Wyoming	23	C	31	D	25	C	33	D	28	C	35	D

Ed Koch, the colorful mayor of New York City, spends a good deal of time asking people on the street "How am I doing?" It's an interesting question. He knows people don't measure him by how well he handles the minutiae of governance, but by whether the garbage gets picked up, potholes get filled, and people feel New York is a good place to live.

It's the same with state economies. There are hundreds of ways to measure the health and attractiveness of a state economy -- and the *Development Report Card* uses many of them -- but the bottom line is whether that economy is meeting its primary goal: assuring widely-shared, long-term economic well-being.

So the first question to ask is: *How is the economy doing?* It is so basic that the fact that the traditional "business climate" definition doesn't even address the question indicates just how misdirected that definition really is. The root of this misdirection is that the old "business climate" definition describes the economy almost solely in terms of sales, profits and investment.

But if you ask the person on the street how the economy is doing, he or she will answer in terms of jobs, income and quality of life -- the same way they answer Ed Koch.

And the fact that they answer this way tells us something fundamental about economic development: the purpose of economic activity is to support and improve the lives of people; the purpose of economic development is to expand the opportunities for people's lives to improve. Business and governments' efforts to improve business vitality are the means to that end.

That is not to say, however, that the performance of a state's economy is of interest only in terms of social well-being. The fact is that businesses are more likely to be spawned in and attracted to economies that are performing well than to those that are not. Good current performance in employment, income and equity, for example, will generate a level of economic energy and investment that, properly channeled and reinvested to strengthen the base of human and physical capital, will improve a state's competitive position, foster the birth of new firms and nurture existing ones, and, over time, build the foundations of the future.

The Performance Index has five subindexes:

1. Employment: the extent to which the economy is providing jobs for those who want them;
2. Income: how much people get paid for their work;
3. Job Quality: the extent to which their income and other non-cash benefits meet basic needs;
4. Equity: the extent to which the opportunity to work is widely shared; and
5. Quality of Life: a rough measure of aspects of people's social and physical environment that are not employment-related.

But first, an additional note about the Performance Index. It is a kind of "snapshot" of an economy at one moment in time. It measures neither progress from the past nor, more importantly, prospects for the future. In many ways, economic history is the record of the sacrifices one generation makes to assure a better life for the next. As the evidence mounts that, for the first time in recent history, younger Americans are earning less, not more, than their parents, and in the face of increasing debt which some argue buys present consumption at the expense of future growth, we should be particularly concerned about the sustainability of the economy. The Performance Index does not -- indeed cannot -- measure sustainability. But this index, particularly when combined with the three indexes that follow, can point the direction of the future.

Subindex One: Employment

For the great majority of a state's residents, the principal indicator of economic performance is the opportunity to obtain a job. In this subindex, we examine four measures of the ability of a state economy to provide that opportunity: employment growth, the unemployment rate, the duration of unemployment, and the employment prospects of displaced workers.

- *Employment Growth*

Jobs are continually being created and eliminated, just as people are continually moving from one job to another and in and out of the labor force. This indicator measures the net job growth (or decline) experienced by a state between 1980 and 1985 in an effort to characterize the degree to which job opportunities are being provided by that economy.

- *Unemployment Rate*

State unemployment rates are an imperfect measure of the mismatch between jobs and job seekers. They count some people not really looking for work, and fail to count many people who have been forced to take part-time in lieu of full-time work, or who have become so discouraged by their inability to find work that they have dropped out of the workforce entirely. But since these imperfections are relatively constant from state to state,[4] it is the best indicator currently available.

- *Duration of Unemployment*

One of the ways of increasing the usefulness of unemployment figures is to measure how long people have been unemployed. Short-term unemployment can occur for a variety of reasons, not all of them negative, and so long as the unemployed worker finds a new and comparable job, with wages and benefits the same or better than the lost job, the cost of the period of unemployment to the worker and to society can be minimal. Indeed the worker's ability to move relatively smoothly from one job to another indicates an economy offering a high degree of opportunity and flexibility and provides the worker a measure of economic freedom.

Long-term employment, on the other hand, reflects a serious mismatch between workforce skills and job availability, a condition that can occur for at least three reasons: (1) the economy is failing to produce jobs, (2) the jobs being created do not match the skill levels of the existing workforce, or (3) the hiring of certain groups of workers is being restricted by some form of discrimination. Whatever the cause, human resources are wasted and development is constrained.

This indicator measures those who have been jobless for more than 27 weeks, bypassing the short-term unemployed and focusing on the point at which unemployment compensation benefits, which can be a disincentive to reemployment, have expired.

- *Status of Displaced Workers*

According to the Bureau of Labor Statistics, the recession during the first half of this decade put some 10.3 million people out of work in a manner which indicated that the job losses would be permanent. Half of that total defined as "displaced" were workers with three or more years of experience. By January 1986, 67 percent of those displaced in the preceding five years had found new jobs, 18 percent were still unemployed, and 15 percent had given up the search and left the workforce.[5] The availability of state data on displaced workers is uneven and only truly reliable for the ten or so largest states. Nevertheless, in the absence of more reliable figures, this measure provides some real insight on the ability of state economies to deal with the job losses caused by the restructuring of the economy.

Subindex Two: Income

The possession of a full-time job in America today is no guarantee of economic self-sufficiency. A full-time job at minimum wage provides a sub-poverty level income for a family of four. Income adequacy is perhaps the most straightforward indicator of how people and economies are doing. Three indicators are used in this Subindex: earned income per capita, per capita income change, and the percent of the population below the poverty line.

- *Earned Income Per Capita*

Wages and salaries are the principal source of income for most Americans. In fact, some 83 percent of per capita income produced in the United States comes from employment, rather than from stocks, bonds, businesses and other income-producing assets. Thus, the best way to measure how most of us are doing is to measure per capita earnings.

- *Income Change Per Capita*

To get beyond income levels to income trends, this indicator measures how income has changed between 1980 and 1985. Unlike the earned income measure, this indicator includes non-wage and salary income sources and is adjusted for inflation so as to more accurately illuminate standard of living.

- *Percent Below the Poverty Line*

An economy with a high percentage of people below the poverty line -- whether they work or not -- is an economy that is not doing the job of providing people with opportunities for a better life. In a very human sense, it is a clear indicator of economic failure.

Subindex Three: Job Quality

Employment and income figures give us only part of the "snapshot" of how an economy is doing. If people are working long and hard and still remain below the poverty level, if they have a high likelihood of being injured on the job, and if injured or simply ill are unable to obtain adequate medical care, the economy is failing in crucial ways. As a first cut at measuring the quality of the jobs in a state economy we examine: the number of working poor, hourly earnings, job-related injury rate, and health coverage.

- *Number of Working Poor*

A refinement of the overall population below the poverty line, this indicator measures the number of people working in low-wage industries who, despite their full-time work, still live below the poverty line. This measure also provides an indirect indication of the extent to which people are covered by health and related benefits that the rest of the working population has come to take for granted, because few of the jobs the working poor hold provide any benefits.

- *Hourly Earnings*

The hourly earnings of production workers is a useful guide to the likely average pay for manufacturing employees in a state. The data, which are highly reliable and current, comprise the most accessible indicator of relative wages.

- *Job-Related Deaths*

This indicator provides a rough approximation of job-related health and safety. To an extent, the incidence of work injuries is a reflection of state industrial structure, and the only data readily available on this subject cover only the construction and mining industries. To avoid penalizing those states with large industries in these sectors, the results are corrected and presented as a percentage of mining and construction employees.[6]

- *Health Coverage*

Many of the jobs being created in today's economy provide no health benefits.[7] For Americans who are neither very poor nor aging, health insurance coverage can depend solely upon the willingness of employers to provide such benefits. Individual coverage is out of the financial reach of many.

Subindex Four: Equity

The evaluation of the performance of a state economy must be based upon not just the gross employment and income of that state, but the distribution of opportunities to gain employment and income as well. The social and economic consequences of the inequitable distribution of opportunity are only too clear -- poverty, social discord, crime, wasted talent and diminished productivity. The attractiveness and vitality of a state's economy will be influenced in significant ways by how economic change affects the least advantaged in society and the extent to which the best jobs in the state are distributed on the basis of talent and not social status, race, sex or patronage.

As with so many key measures of economic performance, the lack of precise indicators means we must approach the equity issue indirectly, by measuring the distribution of income in the state (the "gini coefficient"), the benefits paid under the Aid to Families With Dependent Children (AFDC) program as a percentage of state income, and black income as a percentage of white income.

- *Distribution of Income*

To measure the distribution of income in a state from the most wealthy to the most poor, we use the "gini coefficient," a statistical technique by which the population is divided by income level intervals and a calculation based on the number of residents in each interval yields a pattern of income distribution. The most inequitable distribution of income -- where one person holds all the income, for example -- would yield a coefficient of 0.0. A perfectly equitable distribution would yield a coefficient of 1.0 -- that is, each ten percent of the population receives ten percent of the income. Reality falls in between. The states with the highest scores -- those most approaching 1.0 -- have the most equitable distribution of income, while those with the most inequitable distributions have the lowest scores, approaching 0.0.

- *Black Income as a Percentage of White Income*

Like the gini coefficient, income by race is an indicator of the distribution of income and opportunity across society. Although states have made significant progress in ameliorating discrimination, significant problems remain. This measure indicates the extent of the economic racial divide between the white and black population and the extent of the inequality of opportunity in each state.

- *AFDC Benefits as a Percentage of Per Capita Income*

Franklin D. Roosevelt said that one measures the quality of a society not by what it does for those who have much, but by what it does for those who have little. This indicator measures a state's willingness to spread the benefits of economic activity to those not currently sharing in that activity. Specifically, this indicator compares the AFDC benefits paid to a family of four with the per capita income of the state, stating the result as a percentage of per capita income.[8]

Subindex Five: Quality of Life

One of the ironies of developing a new set of indexes for evaluating the health and "attractiveness" of state economies is that the factors that are increasingly important determinants of where businesses are likely to grow or locate -- factors having to do with the "quality of life" in the state[9] -- are the ones for which we have the least perfect measures. The issue goes beyond environmental amenities to include a variety of economic, social, and psychological factors as well, but there are no direct measures and there is no agreement about indirect measures either.[10]

As "quality of life" factors have increased in importance, a variety of measuring systems have been devised, all for different purposes. The United Nations, for example, has a system for comparing the progress of developing countries, but the measures have little relevance to states. The Organization for Economic Cooperation and Development (OECD) has another system which measures the living conditions in OECD countries (health, education, employment, quality of worklife, leisure time, physical environment, personal safety and others) but any such system fails to account for the diversity of conditions within a given state, and in any event very little data is available to apply such a system in the United States, in part because federal funding cutbacks have eliminated data collection programs.

This index recognizes the importance of quality of life indicators in determining economic performance, but is forced at this point to rely on three very narrow and admittedly inadequate indicators for which information currently exists: life expectancy, infant mortality, and a crime index. The development of more encompassing quality of life performance indicators is a major objective of the *Development Report Card.*

- *Life Expectancy*

Surprisingly, there are relatively substantial differences from state to state in average life expectancy. In the absence of more illuminating indicators of the living conditions in states, this indicator offers at least a coarse comparative analysis.

- *Infant Mortality*

Infant mortality is a commonly used measure of the health of the population for a number of reasons that go beyond the death of infants per se. First, infant mortality correlates highly with the health and nutrition of the mother, both of which are, in turn, indications of living standards and access to educational services for prenatal care. Second, mortality during the first year provides insight into the general living conditions of both mother and child during this critical period.

- *Crime Index*

A key component of quality of life is actual and perceived personal safety. The index published annually by the Federal Bureau of Investigation is the most commonly used tool for measuring and comparing the personal safety of the population. The FBI index, a composite of seven types of crimes (murder, rape, robbery, assault, burglary, larceny and motor vehicle theft) has become increasingly valuable for point-in-time comparisons among states as the social acceptability of reporting some kinds of crime -- rape, for example -- has increased. While there may be some reporting bias still inherent in the index, there is no reason to assume significant variation among states.

Findings

Perhaps not surprisingly, the New England states lead in the overall performance index rankings -- a reflection of the complex resurgence of the economies of the individual states in that booming region.[11]

Somewhat more interesting is the strong, if not leading, showing of several heavily industrial states, including New York, New Jersey, Pennsylvania and Delaware in the Mid-Atlantic and Minnesota and Wisconsin in the northern Great Lakes states -- strong evidence that being in the so-called "Frostbelt" is no longer synonymous with decline.

With very few exceptions, the southern states are at the bottom of the overall performance rankings, the victims of a history of low-paying, footloose industries, the steady decline of agriculture, and the somewhat more recent decline of energy-related industries. What is intriguing about these results is that the nation's industrial giants -- states like Michigan, Illinois, Ohio and Indiana -- all have

economies performing significantly better than many of the Sunbelt states, and have been for several years -- despite a lingering and erroneous public perception that the "Rust Belt" is still in the nation's economic cellar.

Employment Subindex Findings

The bottom of the employment subindex is a lot clearer than the top. The nation's big industrial states, still reeling from the recession in the first half of this decade, do poorly -- with Illinois, Ohio, Pennsylvania, Michigan and Wisconsin all in the bottom ten. Also bringing up the rear are several states dependent upon energy, mining, agriculture and timber, all of which have fared poorly in the last few years -- Iowa, Kentucky, Louisiana, Mississippi, Oregon and West Virginia. If anything links the high performers in the employment subindex, it is geographically concentrated technology-based economic booms -- in Massachusetts, Rhode Island and New Hampshire (all revolving around the Boston development phenomenon), as well as in Arizona, Virginia (primarily Northern Virginia) and Georgia (increasingly the economic hub of the South). Several of these states have also experienced substantial population gains (Arizona, Georgia, Florida and New Hampshire) so, in part, employment growth is driven by population growth.

Income Subindex Findings

The Northeast has an almost clean sweep of the top of the Income Subindex reflecting the high wage characteristics of the region's recent economic resurgence. The boom states of New England (Massachusetts, New Hampshire and Connecticut) continue their high showing, and are joined at the top by five strong Mid-Atlantic states (New York, New Jersey, Maryland, Virginia and Delaware). Rhode Island and Maine, particularly its southern counties, share in the rapid economic growth experienced by all areas close to Boston, and are not far behind. Only rural Vermont and industrial Pennsylvania fail to make strong showings. And Colorado is the only non-Northeastern state to make the top ten.

The legacy of low-wage industries places virtually all of the southern states at the bottom of the Income Subindex. Joining them near the bottom are several chronically low-income, thinly-populated Mountain West and Plains states (Idaho, Montana and South Dakota). New Mexico, which has a history of low-wage industries, ranks near the very bottom of this subindex. And the poverty of Appalachia persists in Kentucky and West Virginia.

Job Quality Subindex Findings

For people who work, working conditions and the rewards of work are highest in the industrial Northeast and Great Lakes states. People who work in New York, Michigan, Illinois, New Jersey, Wisconsin, Connecticut, Ohio, Massachusetts, Pennsylvania and Indiana -- states with established major industrial economies -- are the most likely to have safe jobs that pay wages well above the poverty line and provide valuable health benefits.

In contrast, people who work in virtually all of the southern states and in other states that have pursued low-wage business attraction strategies, are the most likely to be earning wages below the poverty line in jobs that have a higher likelihood of injury and that provide few if any health benefits.

Equity Subindex Findings

While states in the Great Lakes industrial belt and in the South have histories of both acute and chronic employment and income distress, how that distress has been distributed among the residents of these states, and how each region has responded to the economic distress of its residents is thrown in sharp contrast by the Equity Subindex. While every one of the southern states ranks at the bottom of the Equity Subindex -- indicating both that the distribution of income (and thus poverty) is inequitable and that the states provide little in the way of assistance to those so affected

-- several of the northern industrial states, including Michigan, Indiana and Wisconsin, are at the very top of this subindex.

Quality Of Life Subindex Findings

This subindex, quite frankly, does not adequately measure all of the aspects of what we have come to call "quality of life." Still, the measures this subindex *does* include -- life expectancy, infant mortality, and crime -- help define the most basic level of the quality of people's lives.

The top of this list is dominated by thinly-populated northern and mid-western states that have experienced few of the negative aspects of urban existence. Two standouts at the top, however, are Minnesota and Wisconsin, industrial states with significant urban centers that seem to have avoided the most troubling symptoms of urban despair.

The bottom of this subindex is dominated by southern states, indicating clearly that they have yet to overcome a historic weakness in the measures that compose this subindex.

4. See Terry F. Buss, "Unemployment Rates and Their Implications for Human Resource Planning," *Journal of Economic and Social Measurement* 14 (1986)

5. Bureau of Labor Statistics, "Employment Status of Displaced Workers," BLS press release, 14 October 1986.

6. Another weakness of this measure is that variations among states may reflect differences in reporting, not actual death rates. Once again, we must deal with the data available until better data can be compiled.

7. See, for example, Barry Bluestone and Bennett Harrison, "The Great American Job Machine: The Proliferation of Low Wage Employment in the U.S. Economy," prepared for the Joint Economic Committee, U.S. Congress, December 1986.

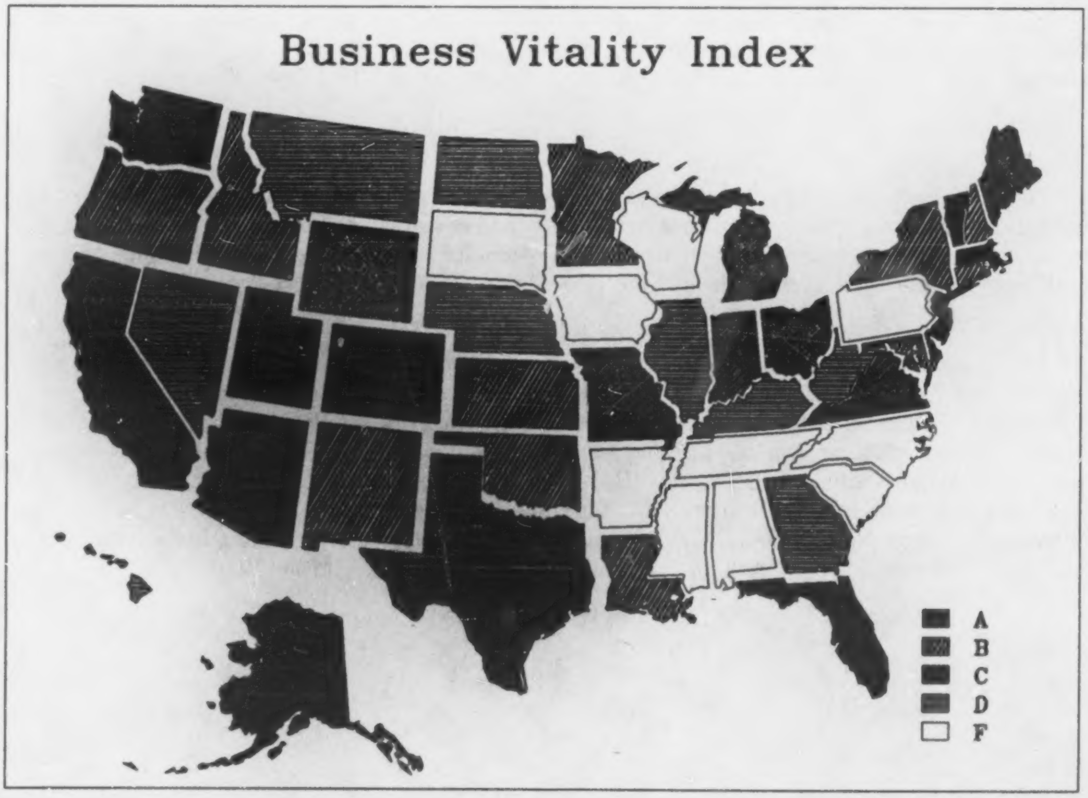
8. Some of the most aggressive and creative reforms of the welfare system in general and the AFDC program in particular are being undertaken at the state level. In this performance index, we do not pass judgment on either the wisdom or likely effectiveness of these state experiments. The objective here is simply to state the extent to which those who do qualify for AFDC payments are capable of supporting themselves and their family members on those payments. See the Policy Index for a further exploration of changes underway in income support programs.

9. See, for example, Roger Schmenner, "Location Decisions of Large Firms: Implications for Public Policy," Commentary, January 1981, and Patricia L. Braden and Susan R. Rideout, "Location Decision-Making in Export-Oriented Business and Industry," unpublished paper, University of Michigan, 1978.

10. Both the Conservation Foundation and the Fund for Renewable Energy and the Environment have developed systems for rating the environmental quality and environmental policies of states. We have examined each and are in the process of designing a system for incorporating the strong points of both, but results will not be available until the 1988 edition of the *Development Report Card*.

11. Throughout the *Findings* sections of the *Development Report Card*, we refer to the following regions: *New England*: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont; *Mid-Atlantic*: Delaware, Maryland, New Jersey, New York and Pennsylvania; *Great Lakes*: Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin; *Plains*: Iowa, Kansas, Missouri, Nebraska, North Dakota and South Dakota; *Southeast*: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia; *Southwest*: Arizona, New Mexico, Oklahoma and Texas; *Rocky Mountain*: Colorado, Idaho, Montana, Utah and Wyoming; *Far West*: Alaska, California, Hawaii, Nevada, Oregon and Washington.

Chapter Three: The Business Vitality Index


Business Vitality Index
A
B
C
D
F

Business Vitality Index Report Card

	Competitiveness Subindex		Entrepreneurial Energy Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	41	F	42	F	49	F
Alaska	4	A	2	A	1	A
Arizona	3	A	6	A	2	A
Arkansas	39	D	30	C	41	F
California	5	A	4	A	2	A
Colorado	13	B	1	A	5	A
Connecticut	7	A	30	C	13	B
Delaware	1	A	48	F	22	C
Florida	18	B	6	A	8	A
Georgia	28	C	38	D	35	D
Hawaii	42	F	19	B	32	D
Idaho	31	D	8	A	15	B
Illinois	24	C	44	F	38	D
Indiana	17	B	35	D	25	C
Iowa	46	F	23	C	41	F
Kansas	36	D	12	B	19	B
Kentucky	40	D	28	C	38	D
Louisiana	18	B	30	C	19	B
Maine	37	D	21	C	27	C
Maryland	16	B	26	C	17	B
Massachusetts	6	A	27	C	10	A
Michigan	9	A	40	D	22	C
Minnesota	14	B	22	C	11	B
Mississippi	48	F	42	F	50	F
Missouri	25	C	33	D	27	C
Montana	49	F	18	B	37	D
Nebraska	43	F	17	B	31	D
Nevada	44	F	20	B	34	D
New Hampshire	20	B	16	B	11	B
New Jersey	20	B	37	D	26	C
New Mexico	32	D	5	A	13	B
New York	12	B	28	C	16	B
North Carolina	32	D	44	F	47	F
North Dakota	45	F	23	C	38	D
Ohio	11	B	47	F	27	C
Oklahoma	37	D	10	A	18	B
Oregon	35	D	13	B	19	B
Pennsylvania	27	C	50	F	48	F
Rhode Island	20	B	46	F	35	D
South Carolina	23	C	49	F	44	F
South Dakota	50	F	25	C	46	F
Tennessee	30	C	39	D	41	F
Texas	2	A	8	A	4	A
Utah	25	C	3	A	9	A
Vermont	8	A	15	B	6	A
Virginia	15	B	36	D	24	C
Washington	10	A	13	B	6	A
West Virginia	29	C	33	D	33	D
Wisconsin	32	D	41	F	45	F
Wyoming	47	F	11	B	27	C

Like Dorothy in *The Wizard Of Oz*, many states go on far-ranging treks in search of an economic "wizard" to sweep away their troubles, never realizing that they possess within themselves the real power to achieve their fondest goals -- and that really "there's no place like home."[12]

Steadily mounting evidence, cited throughout this report, points to four basic principles crucial to business vitality and state economic health:

> *Vital state economies are created by cultivating in-state businesses and entrepreneurs, not by chasing out--of-state branch plants or businesses.*

Most of a state's growth comes from "home-grown" entrepreneurs and businesses, not from outsiders. Between 75 and 80 percent of *net* employment growth comes from new business startups and on-site expansions of existing businesses,[13] and more than half of all new jobs produced come from independent businesses less than five years old.[14] And since entrepreneurs choose overwhelmingly to start businesses where they already live, rather than shop for sites across state lines, what this means is that states already possess within their own borders the chief sources of future economic growth.[15] Moreover, these indigenous businesses are also the primary source of innovation and new wealth creation in any state economy.[16]

What's more, a strong indigenous development strategy can prove to be an effective business attraction strategy as well, since the factors that rank consistently high on the lists of those who make branch plant location decisions -- labor quality, proximity to markets, quality of life and quality of educational systems -- are the same factors that spur the formation and expansion of in-state businesses.[17]

Conversely, the diversion of resources to serve the sole purpose of attracting outsiders, and the impoverishment of the state (through tax abatements and consequent inadequate investments in education, infrastructure and the like) in the pursuit of such outsiders undermines the long-term development potential of the state and its resident industries, in some cases leaving them no alternative but to move elsewhere.

> *What determines the long-term growth prospects of a state is not so much its current performance as it is the ability of existing businesses and entrepreneurs to adapt to and take advantage of change.*

While the current performance of the state's economy -- size, profitability, employment, wage levels, and so forth -- is the base from which its economy will grow, and the future is jeopardized if that base is weak,[18] existing production alone is not enough to assure a bright future. The key determinant is whether the businesses in that base are capable of adapting to current and future change. If a decade ago, for example, we had projected the future vitality of the economies of states in which steel or auto manufacturing predominated solely on the basis of current production, we would have failed to take into account the capacity of those industries to adapt to change; and thus we would have failed to predict the human and economic costs of their inability to do so.

The long-term health of any state economy depends, in large part, upon the ability of the people and businesses within that state to create new products, offer new services, develop new production processes and find new markets. The more rapid the pace of change, the more this is so. Vigorous, vital economies change constantly; those that resist change fall behind.

> *No single industry or sector holds the key to long-term economic vitality.*

While certain kinds of manufacturing industries add disproportionately to the economy by exporting products and bringing new wealth into the state, it takes a diversified economy to guarantee sustainable long-term growth. Diversification is crucial to economic vitality both because it reduces vulnerability to cyclical or unexpected downturns in dominant industries and because, as a practical matter, it is virtually impossible to pick economic winners and losers. Nor is high technology *the* answer; it produces relatively few jobs directly.[19]

The rising service sector is seen by many as a poor substitute for manufacturing because wages can be low and exports minimal. But the service sector has become so diverse that its name obscures more than it illuminates. Recent research has identified at least five subsectors of services, some with significant wage opportunities, skill requirements and exports.[20] Indeed, some service industries -- venture capital firms, for example -- can largely determine the success of other firms.[21]

> *One key to long-term economic vitality is the extent to which businesses and entrepreneurs are taking full advantage of the human, financial, physical and technological resources of the state.*

It is through business activity that the latent capacity or potential of a state (see next chapter) is transformed into economic performance. Tapping the full potential of employees (for example, through new management systems[22]) and potential entrepreneurs, making maximum use of emerging technologies (in older existing industries even more than in new ones), demanding adequate investments in infrastructure, and making creative use of available capital are all crucial to long-term business growth. Thus, by its very nature, business vitality is the product of an aggressive partnership between public and private resource providers.

With these four principles as a base, this index gauges the vitality of businesses within each state, using two major subindexes:

1. The competitiveness of existing businesses, and

2. Entrepreneurial energy.

Subindex One: Competitiveness of Existing Businesses

In today's global economy, in which some 70 percent of what we produce in the United States is subject to international competition, obtaining and sustaining economic success is a function of the capacity of businesses to harness human resources and develop and apply new technologies to produce new goods and services for expanding world markets.

The challenge of international competition is a relatively new one and, as a consequence, few direct measures of how businesses within states are doing at meeting the challenge currently exist. For this first *Development Report Card*, we employ five measures in an effort to get a sense of the competitiveness of existing businesses in each state.

- *International Exports*

A state economy must have a strong traded sector -- that is, firms that produce goods and services that are exported to customers outside of the state and even the nation -- if it is to bring new wealth into the state and remain competitive. The level of international exports, while somewhat incomplete, provides a good sense of the strength of a state's traded sector.

- *Manufacturing Investment Per Production Worker*

We know both that it is harder for large corporations to adjust to change than smaller ones[23] and that the large, mature firms that perform consistently well in today's economy -- in terms of sales, profits and growth -- are those that *do* adapt well to change.[24] They succeed in adapting by operating, in some ways, very like small businesses: they encourage entrepreneurship among employees, invest in them, encourage communication among managers, employees and customers, and they channel a significant amount of capital into technology development and retooling. Measuring the agility and adaptability of existing firms, therefore, requires knowledge of the full range of such investments. At present, however, that information simply does not exist.[25] The closest we can come to approximating such measures is manufacturing investment per production worker -- a measure which is biased to some extent toward states whose economies are dominated by capital-intensive industries.

- *Percent of High Growth Companies*

Each year, *Inc.* magazine records the fastest-growing small private firms in the country. But these "high flyers" are by no means the only small businesses of importance in a state. To more adequately address the full range of rapidly growing young firms this indicator measures the fastest growing firms founded after 1978. The measure is constituted so that it eliminates any bias toward large firms (which might have high absolute growth) or small firms (which might have high percentage growth).[26]

- *Presence of Fortune 1000 Corporation Headquarters*

A crucial measure of competitiveness of any state economy is the ability of the large corporations that dominate that economy to adapt quickly to change. There is, however, no direct -- or even particularly effective indirect -- way to capture that characteristic. Failing this kind of data, we should nevertheless recognize the economic impact of the presence of talent, capital and expertise in a state represented by the top corporations, as measured by the Fortune 1000. In addition to their direct effects, the top corporations tend to spin off their own new enterprises, spawn associated enterprises, and attract new supplying enterprises as well.

Subindex Two: Entrepreneurial Energy

Perhaps the chief gauge of an economy's ability to adapt to and take advantage of change is its ability to create new firms. The increasing role of entrepreneurship[27] in our economy -- the 65 percent rise in business incorporations and the 45 percent rise in self--employment from 1970 to 1984[28] -- reflects the need for innovation in a rapidly changing economy. Young, small firms -- and the individuals who start them -- innovate more, move resources around the economy faster, and can generally move in and out of markets faster and at less expense than larger firms with bigger fixed investments, more layers of management and more restrictive rules.[29] Studies have consistently shown that smaller, younger businesses have higher rates of innovation than larger firms, and that they are able to bring their innovations to market more quickly.[30]

There are, of course, downsides to new business formations. For one thing, they tend to fail (though not as frequently as previously thought).[31] But where business formation rates are high, the losses are often overcome by the gains. Young small businesses do tend to pay less and offer fewer benefits than older, larger companies.[32] But given the fact that the jobs available in new firms offer rare entry opportunities for workers who might otherwise be unemployed, it may be more relevant to compare wage rates in new small businesses with unemployment benefits, rather than large companies. This is not to say that the creation or loss of "good jobs" is unimportant. Understanding why some firms and sectors create them and some do not is critical to developing effective development policies.

This subindex measures two kinds of evidence of entrepreneurial energy: new business formation and self-employment.

- *Business Formation Rates*

Business incorporation rates both understate and overstate actual entrepreneurship. Because of how the statistic is compiled, financial, insurance and real estate businesses are not counted, while paper transactions, like the incorporation of existing firms or the displacement of one firm by another, are counted. Therefore this measure, based on data developed for *Inc.* magazine, deals with all companies founded since 1982 that had at least 10 employees by 1986, and calculates "birth rate" by dividing by the total number of businesses within the state.

- *Self-Employment Rates*

Microbusinesses -- firms that may employ only the founder and one or two others -- can be viewed as the first evolutionary stage in economic growth. They are the proving ground for entrepreneurial ideas, the training school for entrepreneurial skills, the frontier of economic development -- particularly in communities with little to show in the way of economic activity. What's more, they have value beyond the creation of a handful of new jobs and income. Business begets business and entrepreneurship begets entrepreneurship. Successful self-employment offers an example for others to follow, and follow they often do, both within the community and among generations.[33]

- **Minority And Women Business Ownership**

The literature argues persuasively that entrepreneurship knows no racial, class or gender distinctions and, in fact, that it is precisely those people for whom economic opportunity is otherwise blocked who are most likely to choose self-employment. It is unlikely that equitable economic performance will ever be achieved for women and minorities unless they are able to enter the economy as entrepreneurs in numbers proportionate to their presence in the general population.

And there are other, less obvious reasons for including women and minority entrepreneurship in any examination of the economic vitality of states. For one thing, minority employers are more likely to put down roots in distressed communities and more likely to hire minority employees than other firms.[34] For another, research suggests that differences in ethnic group business participation rates -- and income levels -- are explained by differences in business formation and self-employment rates, not business failure rates.[35]

Two indicators help illuminate, indirectly, the extent to which opportunities exist in states for entrepreneurship among minorities and women.

- *Women's Business Ownership*

Women's business formation rates have been increasing at a rate three to five times that of men since 1977, indicating both the extent to which entrepreneurship has been bottled up and the extent to which opportunities have been created. Their percentage of the total workforce alone makes measuring the opportunity for entrepreneurship among women a key indicator of economic vitality in any state.

- *Minority Business Ownership*

In a similar manner, and for the reasons cited above, measuring the extent to which opportunities for entrepreneurship exist for minorities and are encouraged as a matter of policy is also a key to determining the economic vitality of a state. Here minority entrepreneurship is measured as a percentage of the minority labor force.

Findings

The findings of the Business Vitality Index tell us a lot about some kinds of businesses and less about others. The relative shortage of useful data on the vitality of large businesses (either because it does not exist, is reported by company headquarters rather than where branches are located, or is complex and expensive to process) means that this index tells us somewhat more about the vitality of new businesses than established ones. As a consequence, this index tells us more about where new jobs are being created and the business energy levels of fast-growing states than about the competitiveness and vitality of older, established industrial states.

The highest overall ranks in the Vitality Index are held primarily by states that embody two characteristics: little or no history of reliance upon older manufacturing industries, and a cultural predisposition to independence and self-employment (Alaska, California, Arizona, Texas and Colorado, among others). They also tend to be states that have seen rapid recent population growth and produce a fairly high level of exports.

The picture at the bottom of the index is clearer. Once again, southern states lag behind the rest of the nation (Mississippi, Alabama, North and South Carolina, Arkansas and Tennessee). They are joined by a few other states whose position is better explained in the subindex discussions below.

We would expect many of the states that led the Performance Index in the previous chapter to do well in this index, and they do. The top performance states -- Massachusetts, Connecticut, New Hampshire, Minnesota, Vermont, Washington and California -- all score in the top 20 of the Vitality Index.

Competitiveness Subindex Findings

Despite our reservations about the precision of the measures available for the Competitiveness Subindex, the results present a clear and reasonable pattern. The leaders have economies that have a heavy technology component and are major exporters -- Massachusetts, Connecticut, California, Michigan and Arizona. Three others -- Alaska, Texas and Delaware -- reflect a combination of these factors and an additional energy/petrochemical influence. Because most of the data used do not cover the last two years, the collapse of the energy industry is not reflected in the rankings.

The next tier -- the states earning "B's" in competitiveness -- include most of the major industrial states (Ohio, New York, Minnesota, Indiana and New Jersey), and a few more technology and defense-oriented states (Rhode Island, New Hampshire, Maryland, Virginia and Colorado). An examination of results in individual measures shows Florida to be a steady, if not flashy, performer in this subindex.

The bottom ranking states -- South and North Dakota, Montana, Mississippi, Wyoming, Iowa, Nevada, Nebraska, Alabama and even Hawaii -- have several things in common. They tend to have little in the way of industrial development, are poorly diversified, and (with the exception of Hawaii) rely to a significant extent on agriculture. Alabama is additionally hamstrung by a slumped steel sector.

Entrepreneurial Energy Subindex Findings

With only one exception, *all* of the top performers in the Entrepreneurial Energy Subindex are in the West. They have more in common, however, than simply geography. Each of these states -- Colorado, Alaska, Utah, California, New Mexico, Arizona, Idaho, Texas and Oklahoma -- underwent rapid population growth during the period measured, as did the only geographic exception, Florida. In addition, there exists in this region a clear cultural predisposition toward self-employment -- an undeniable legacy of the pioneering spirit, and an indication that the barriers to entry for minority and women entrepreneurs may well be lower in this region than elsewhere in the nation.

The contrast in this regard with the states at the bottom of the list -- Pennsylvania, South and North Carolina, Delaware, Ohio, Rhode Island, Illinois, Mississippi, Alabama, Wisconsin and Michigan -- could not be clearer. All over the map in geographic terms, these states have one thing in common: they are factory states -- automobiles, steel, textiles -- and have been for decades. With a lot of people employed in a handful of large plants within one or two industrial sectors, these economies represent a high degree of vulnerability to change, not an ability to capitalize on change.

Several of the states that score well in this subindex also did well in the competitiveness subindex, suggesting that there can be a stepping-stone relationship between self-employment and business formation and growth. But the link is not universal; in some states, particularly thinly-populated ones, self-employment may well be "the only game in town." That is, while individuals may currently be self-employed, they may never move to the stage of forming and building their own companies and generating significant new growth for the state -- either because they do not choose to do so, or because neither demand nor support systems may exist.

12. This is not to suggest that national and international trends do not have important, sometimes wrenching, effects on state economies. But states have little control over these events, while marshalling their own resources is clearly within their power.

13. See, for example, Catherine Armington, *Further Examination of Recent Employment Growth Analysis of USEEM Data for 1976-1980*, (Washington, D.C.: The Brookings Institution, March 1983); The Rhode Island Strategic Development Commission, *The Greenhouse Compact*, (Providence, RI: The Rhode Island Strategic Development Commission, 1984); and Karl Seidman, "The Role of Taxation in State Business Climate," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987.

14. See David Birch, "The Job Generation Process," MIT Program on Neighborhood and Regional Change, 1979).

15. See Eva Mueller and James M. Morgan, "Location Decisions of Manufacturers," *American Economic Review* 52 (March 1962); and Harold Wolman, *Components of Employment Change in Local Economies: A Review and Critique of the Literature*, (Washington, D.C.: The Urban Institute, 1979).

16. See The Corporation for Enterprise Development's "Entrepreneurship" literature review.

17. See especially Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982), and the Corporation for Enterprise Development's Economic Climate Project literature reviews: "The Location of High-Tech Industries," "Business Climate and Industrial Location," and "The Location of Services."

18. In a well-developed economy with a strong base, there will tend to be a store of role models, skills, business services, investable capital and confidence which can spur future development. Conversely, in a depressed economy these components of growth will be limited.

19. See, for example, Thomas M. Stanback, Jr., Peter J. Bearse, Thierry J. Noyelle and Robert A. Karasek, *Services: The New Economy* (Totowa, NJ: Allanheld, Osmun & Co., Inc., 1981); and William B. Beyers, Michael Alvine and Erik G. Johnsen, "The Service Economy: Export of Services in the Central Puget Sound Region," Report for the Central Puget Sound Economic Development District, Seattle, WA, April 1985.

20. See U.S. Congress, Office of Technology Assessment, *Technology, Innovation, and Regional Economic Development*, (Washington, D.C.: Government Printing Office, July 1984).

21. Wilbur Thompson and Philip Thompson, "From Industries to Occupations: Rethinking Real Economic Development," *Economic Development Commentary* 9 (Fall 1985).

22. See George Melloan, "Business World," *Wall Street Journal*, 24 February 1987.

23. See Eli Ginzberg and George Vojta, *Beyond Human Scale: The Large Corporation At Risk* (New York: Basic Books, 1985).

24. See both Thomas J. Peters and Robert H. Waterman, Jr., *In Search of Excellence: Lessons from America's Best Run Companies* (New York: Harper & Row, 1982); and William J. Abernathy, Kim B. Clark, Alan M. Kantrow, *Industrial Renaissance: Producing A Competitive Future For America* (New York: Basic Books, 1983).

25. For a sample study of technology adoption rates, see John Rees, "Linking New Production Methods and Regional Growth Rates," *Economic Development Commentary* 10 (Spring 1986). Arthur Young and Company has developed a process and a set of indicators for determining the environment for innovation in larger firms.

26. This measure originally developed by Cognetics, Inc. of Cambridge, MA for *Inc.* magazine. Used with permission of *Inc.* magazine. For additional discussion, see Joseph P. Kahn, "Growing Places: Report on the States," *Inc.*, October 1986.

27. We use entrepreneurship here to denote the formation of new, for-profit firms. But entrepreneurship is better conceived as the process of combining resources in new ways to add value -- a process that can and does occur as well in many large firms, non-profit firms and government institutions. See Peter F. Drucker, *Innovation and Entrepreneurship* (New York: Harper & Row, 1985).

28. U.S. Small Business Administration, *The State of Small Business* (Washington, D.C.: Government Printing Office, 1984, 1985, 1986).

29. U.S. SBA, 1986.

30. Karl H. Vesper, *Entrepreneurship and National Policy* (Chicago: Heller Institute for Small Business Policy Papers, 1983).

31. Candee S. Harris, "The Magnitude of Job Loss From Plant Closings and the Generation of Replacement Jobs: Some Recent Evidence," *The Annals of the American Academy of Political and Social Science*, September 1984. See also Robert Meyer, "Structural Change and Job Dislocation," unpublished paper, The Brookings Institution, April 1984). While younger and smaller businesses are more likely to fail and close than older, larger firms, these loss rates are often overstated and are, in any case, overshadowed by firm birth and expansion rates. Less than one percent of all businesses fail each year with a loss to creditors. Of these, 80 percent have survived their first two years, with the big failure rates occurring in years three, four and five -- by the end of which period 61 percent of the failures will have occurred. A larger percentage of businesses -- eight to nine percent -- close each year for a variety of reasons, many having little to do with the intrinsic value

of the business, and these too tend to be younger and smaller, though not exclusively so. Kibre Dawit and Robert Friedman, "Myths of Small Business Failure," *The Entrepreneurial Economy* 1 (July 1982).

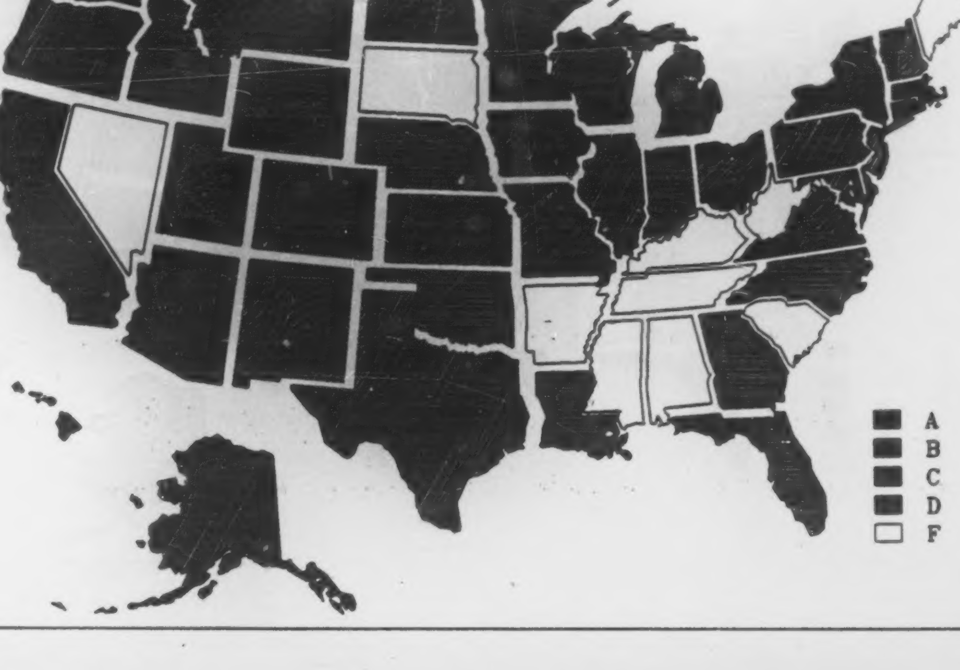
32. See *The State Of Small Business.*

33. See, for example, Eugene P. Foley, "The Negro Businesswoman: In Search of a Tradition," *Daedalus* 95 (Winter 1966); Federico V. Magdalena, "The Filipino Entrepreneurs of Hawaii: An Inquiry Into Their Roots and Success," unpublished doctoral dissertation, University of Hawaii, 1977; Bernard Saracheck, "Jewish American Entrepreneurs," *Journal of Economic History* 40 (June 1980); David Caplovitz, *The Merchants of Harlem* (Beverly Hills, CA: Sage Publications, 1973); and Janice K. Demarest, "Women Minding Their Own Business: A Pilot Study of Independent Business and Professional Women and their Enterprises," unpublished doctoral dissertation, University of Colorado, 1977.

34. A survey of inner city businesses in Buffalo revealed that nearly 100 percent of full-time employees of black-owned firms were blacks, while only 21.5 percent of the employees of white-owned businesses were black. For a review of minorities and enterprise development, see The Corporation for Enterprise Development's *The Entrepreneurial Economy* 3 (April 1984).

35. See Richard L. Stevens, "Measuring Minority Business Formation and Failure," *Review of Black Political Economy* 12 (Spring 1984).

Chapter Four: The Capacity Index


Capacity Index

Capacity Index Report Card

	Human Resources Subindex		Financial Capacity Subindex		Infrastructure Subindex		Amenities Subindex		FINAL GRADE	
	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
Alabama	45	F	48	F	23	C	49	F	46	F
Alaska	20	B	22	C	4	A	19	B	16	B
Arizona	11	B	11	B	6	A	36	D	9	A
Arkansas	50	F	43	F	26	C	42	F	48	F
California	8	A	4	A	5	A	11	B	3	A
Colorado	6	A	17	B	7	A	21	C	4	A
Connecticut	2	A	6	A	13	B	8	A	2	A
Delaware	9	A	12	B	27	C	5	A	8	A
Florida	38	D	19	B	16	B	23	C	32	D
Georgia	38	D	37	D	13	B	29	C	37	D
Hawaii	19	B	24	C	10	A	8	A	15	B
Idaho	34	D	35	D	7	A	50	F	36	D
Illinois	28	C	3	A	11	B	12	B	14	B
Indiana	32	D	40	D	39	D	32	D	40	D
Iowa	21	C	22	C	27	C	46	F	25	C
Kansas	18	B	13	B	34	D	44	F	21	C
Kentucky	49	F	38	D	30	C	35	D	45	F
Louisiana	43	F	28	C	13	B	43	F	39	D
Maine	40	D	46	F	47	F	33	D	44	F
Maryland	4	A	26	C	45	F	15	B	13	B
Massachusetts	1	A	2	A	19	B	1	A	1	A
Michigan	36	D	20	C	40	D	6	A	35	D
Minnesota	12	B	7	A	17	B	3	A	6	A
Mississippi	48	F	50	F	42	F	46	F	50	F
Missouri	29	C	17	B	50	F	13	B	29	C
Montana	26	C	25	C	12	B	36	D	24	C
Nebraska	31	D	32	D	7	A	41	F	34	D
Nevada	44	F	45	F	2	A	45	F	42	F
New Hampshire	22	C	41	F	24	C	28	C	30	C
New Jersey	15	B	10	A	37	D	3	A	11	B
New Mexico	13	B	35	D	30	C	31	D	22	C
New York	7	A	1	A	43	F	2	A	5	A
North Carolina	37	D	38	D	33	D	16	B	38	D
North Dakota	35	D	20	B	1	A	38	D	27	C
Ohio	24	C	30	C	37	D	19	B	28	C
Oklahoma	32	D	26	C	22	C	25	C	31	D
Oregon	16	B	13	B	36	D	25	C	17	B
Pennsylvania	13	B	9	A	44	F	7	A	12	B
Rhode Island	3	A	5	A	49	F	10	A	7	A
South Carolina	47	F	44	F	40	D	30	C	47	F
South Dakota	42	F	29	C	21	C	40	D	41	F
Tennessee	41	F	42	F	45	F	18	B	43	F
Texas	26	C	8	A	17	B	17	B	18	B
Utah	17	B	47	F	25	C	24	C	26	C
Vermont	5	A	31	D	27	C	14	B	10	A
Virginia	22	C	16	B	35	D	27	C	23	C
Washington	24	C	15	B	20	B	22	C	19	B
West Virginia	46	F	49	F	47	F	34	D	49	F
Wisconsin	10	A	32	D	32	D	38	D	20	B
Wyoming	30	C	34	D	3	A	46	F	33	D

While the performance and business vitality indexes tell us a lot about how a state economy is currently doing, we need to know something about how that economy is likely to do in the future -- that is, its potential ability both to produce in the face of rapid economic change and to generate sustained and widely shared economic opportunities -- before we can adequately characterize its overall attractiveness for economic growth.

The Capacity Index is a measure of two things: the relative availability of the basic resources that feed and support the economy -- an educated and skilled labor force, a range of financial capital resources and well-developed physical infrastructure -- and the aggressiveness with which these "economic nutrients" are being developed and used to strengthen the state economy. These indicators do not predict the future, but they do define the boundaries of the possible -- the potential for economic success and the willingness of states to develop that potential.

Because economic development is a profoundly human process, human resource indicators are crucial to this index. While financial capital, physical infrastructure and raw materials are the building blocks, it takes people to take these building blocks and create the structure of an economy. The more skilled the builders, the stronger and more lasting the structure.

The direct connection between the quality of the basic components of the economy and the likelihood of individual businesses to succeed in that economy has not been lost on the nation's business leaders. Recently, survey after survey has revealed that factors long ignored by traditional business climate indexes -- such as the caliber of the educational system, the level of skill in the workforce, the extent of the technological and entrepreneurial base, the condition of physical infrastructure, the availability of the right kinds of financial capital and the quality and quantity of environmental and cultural amenities -- are the dominant concerns of executives who make business investment and location decisions. Firms are locating where people want to live and businesses are being born where resources exist to support them.[36]

This index, then, measures state capacity to supply current and future development with the capital, physical, amenity, and human resources required for growth. Because of their overarching importance, human resource measures predominate.

Subindex One: Human Resource Capacity

From painful recent experience, business leaders, academic researchers, and government officials have concluded that the key to the challenge of competitiveness in today's global economy is education and its products: a skilled and adaptable workforce, an increasing pool of innovators, and the rapid application of new technologies to the creation of new products, services and production systems. It is increasingly clear that economic development is sharply restricted when skilled labor, a solid research and development base and strong management expertise are lacking.[37]

The human resource capacity subindex explores both levels of educational attainment and how those levels translate into economic development potential. Four indicator categories are used.

■ Labor Force Skills and Educational Quality

The skills of a state's workforce, and the extent to which those skills are adaptable to changing economic circumstances, are the most basic components of its human resource base. The kind of diversified economic activity that will support sustainable growth and better-paying jobs demands a broad range of employment skills: basic reading and computation skills, construction trade skills, industrial skills, engineering expertise, computer knowledge and management skills, among others. There is increasing evidence of a direct relationship between the range and availability of these skills -- along with management's willingness to use them -- and the potential for growth of state economies.[38]

But knowing that the existence of such skills is an important indicator of development capacity and being able to measure them are two different things. Measuring skill levels within and across industries in a state economy, and the extent to which those skills are being utilized, are practically impossible. This subindex measures:

- *College Education Attainment,* the percentage of the adult population age 25 and older with at least a college education; and

- *High School Graduation Rate,* to assess the educational capacity or "preparedness" of the newcomers to the state's workforce.

Finally, this indicator category attempts to illuminate, though indirectly, the *quality* of the state's educational system. Commonly, SAT and ACT scores are used as a measure of quality, but such scores are relevant only for those who take these standard college entrance examinations -- only a part of the overall student population. Moreover, these tests say nothing about those students who drop out before the Junior or Senior year of high school when these tests are normally given. Instead, this indicator category measures:

- *Public Expenditures Per Pupil;*

- *Teacher/Pupil Ratios in Primary and Secondary Schools;* and

- *Net Migration of College Students,* a measure of the attractiveness of the state's institutions of higher education.

■ Technological Innovation and the Pool of Innovators

Technological innovation is the seed from which businesses and economies grow. It is at the root not simply of "high-tech" businesses but, increasingly, all sectors of the economy. The rapid acceleration of technological innovation has dramatically reshaped the economic landscapes of states -- from the rapid emergence of the computer industry from the ruins of Massachusetts's industrial past, to the revitalization of heavy industry in Michigan and the Midwest -- and it continues to do so.[39]

Technological innovation transforms economies in three ways: by creating entirely new industries when research spawns new products that meet or create market demand; by improving existing products and rejuvenating existing markets; and by changing production processes in ways that lower costs, improve quality, or both, thus making industry more competitive. The more frequently these transformations occur, the stronger the state economy and the greater the growth in direct and indirect employment and income. Moreover, innovation begets innovation. That is, as the pool of innovators and the investments in research and development increase, the number of businesses spawned by or attracted by the innovation grows, reducing the out-migration and increasing the in-migration of workers and technicians and, in the process, generating new applications of the technologies being developed.[40]

This process, called "the agglomeration principle" by many economists, is driven by people -- particularly scientists and engineers -- and by investments in research. Therefore, the measures used in this indicator category include:

- *Scientists and Engineers as a Percent of the Workforce;*

- *Number of Doctoral Degrees in Physical Sciences and Engineering,* a measure of the extensiveness of science training in the state, not of the number of recipients who stay in the state;

- *Patents Issued Per 1,000 Residents,* a measure of the rate of innovation (though patents are registered by the location of the company headquarters, not the lab where the innovation was developed);

- *University Research and Development Spending;*[41] and

- *Federal Research and Development Spending.*

- **Entrepreneurial Culture**

Though difficult to measure with any precision, there is no question that some communities and states have created an environment that stimulates and rewards individual initiative and entrepreneurism, and some have not. Entrepreneurs -- people who initiate, organize and manage new enterprises -- are a particularly important subset of any state's human resource endowment because they are the primary force behind innovation and new business formation and, therefore, new job and wealth creation. The stronger the state's entrepreneurial environment, the more vital and attractive the economy.

- *Entrepreneurial Awareness*

Through a process known as content analysis, it is possible to gain a rough estimate of the importance attached to entrepreneurial activity in a state by measuring the frequency with which it is the subject of articles published about the state. Two content analysis measures are combined in one score in this indicator category: one which measures the proportion of published articles in the nation about entrepreneurship which mention the state; and a second which measures the relative proportion of articles in the nation about the state which mention entrepreneurship.[42]

Subindex Two: Financial Resource Capacity

Financial capital is the means by which new businesses get started and existing businesses expand, retool and stay competitive. In a very real sense, it is the catalyst by which raw materials, energy and labor are converted into products and services, and thus jobs and income.

The relative availability of capital in a state sends a signal to would-be entrepreneurs that their ideas can become businesses in that state, and at the same time provides the wherewithal for businesses already in the state to continue to grow. The more developed the network between bankers, venture capitalists and other financiers, businesspeople and state economic development officials, the healthier and more attractive the environment for growth.

The kind of capital a business requires depends on the stage of development it is in. In its infancy, as ideas are being developed and commercialized, a business needs small amounts of "patient" money -- equity and long-term debt. As it matures and expands it needs larger amounts of equity and debt financing to acquire land, plant and equipment. To stay competitive, it will also need intermediate debt to finance working capital, marketing, equipment changes and replacement, and so forth. And older businesses need long--term debt and equity to finance retooling and, in some cases changes of ownership -- employee takeovers, leveraged buyouts and the like. The unavailability of capital at any of these stages can bring the entire enterprise to a halt.

Capital availability depends on both the underlying capital resources of the state's financial institutions and the aggressiveness with which those institutions invest their resources. And while capital markets are increasingly national, there are still wide variations. Some states have more competitive banking than others. Not all bank services and products are available universally. Formal venture capital still tends to be concentrated in a few states. And the base of capital that can be made available varies from state to state. Consequently, the financial "culture" of states can vary significantly, creating differences in the attractiveness of states for development.

The indicators employed in this financial capacity subindex are of two types:

- **Capital Resources**

Capital resources are those that help describe the basic financial resources available for investment in the state, and includes:

- *Commercial Bank Deposits Per Capita,* a measure of these banks' capacity to support the financial needs of businesses;
- *Dividends, Interest and Rent Income Per Capita,* an indirect measure of the wealth of the state's residents and, therefore, the relative availability of informal sources of investment capital from local investors; and
- *Venture Capital Headquartered in the State.* Recent studies indicate that locally managed funds are often crucial to risk capital availability.

- **Capital Utilization**

This second type of indicator, which helps to measure the utilization of capital, illuminates something about the aggressiveness of financial institutions. Some financial institutions invest in the state's economy; others are more risk averse, preferring "safe" national investments. Some are aggressive in consumer markets, like credit cards, but do little for local businesses. To account for these differences, this category includes:

- *Loans to Equity,* a measure of how aggressively a state's banks are using their equity base for loans; and
- *Commercial and Industrial Loans Per Non-agricultural Employee,* a measure of how a state's banks are using their resources, while adjusting for agriculturally-based economies.

These measures cover a range of financing needs, from risk capital to fixed-asset financing and working capital available from commercial banks. Of course, there are other players in the capital marketplace, but they are not included here for several reasons. Thrift institutions, for example, are now able to provide business loans, but they have been slow to enter the market and are not as yet important sources of business capital. Commercial finance companies, while an increasingly important source of capital for small businesses, are not regulated and little information is available about their impact on a state by state basis. Insurance companies are important sources of capital for large corporations, but they operate on a national or international basis and are thus not relevant in measures of state capacity.[43]

Finally, state governments have recently entered the capital marketplace with their own public or publicly-chartered venture capital and business lending programs, with their own investment policies, or through more strategic regulation of private capital institutions. This increasingly important new source of financial capacity is discussed in Chapter Six.

Subindex Three: Physical Infrastructure Capacity

The capacity of a state's physical infrastructure -- its roads, bridges, airports, water supply and water quality, and sewage collection and treatment systems -- form the foundation of its economy, a foundation upon which all businesses build. Broken water mains, failed treatment systems, collapsed bridges and a pervasive failure of public agencies to invest in the maintenance of these systems led to widespread concern about the nation's "infrastructure crisis"[44] and resulted in new research on the linkages between infrastructure quality and economic vitality. The result? Perhaps not surprisingly, these studies found that well-maintained public infrastructure makes a positive and significant contribution to the output of economies.[45]

States, universities and others have initiated a number of new studies to estimate the costs of refurbishing infrastructure -- rebuilding roads and bridges, upgrading water and sewer systems and the like. But while there is broad agreement that growth potential is directly affected by the quality of these systems, there is little agreement about how to measure their current condition. The indicators used in this subindex do not resolve this problem, but they do point out the differences in infrastructure quality among states.

One caution must be noted. It is possible that in rare instances a high ranking on infrastructure could be a reward for overbuilding. What this subindex is designed to measure, and will measure more completely next year, is whether states have effective capital planning and budgeting programs that incorporate systematic monitoring and evaluation procedures.

- *Transportation System Capacity*

This measure indicates the number of rural, non-interstate roadways which have poor serviceability ratings according to the Federal Highway Administration.

- *Sewage Treatment Plant Capacity*

This measure calculates the dollar amount of unmet sewage treatment plant needs per capita, based on U.S. Environmental Protection Agency data. The availability of excess treatment capacity can be a powerful attractor for new development, but the reverse is also true -- without adequate capacity, existing businesses are constrained and new businesses must seek other sites or invest in their own facilities.

- *Airport Capacity*

For a wide array of high value-added products and services, the availability of a major airport can be a crucial component of growth and, therefore, a key part of a state or community's attractiveness for development. This measure, which counts only flights handled by the Federal Aviation Administration, is an indicator of the level of activity, and thus capacity, of a state's airports. It is not, however, a fail-safe indicator because some airports serve multi-state markets.

Subindex Four: Amenities

Amenity resources are part of the capital stock of every community, state and nation. They are fixed capital assets that, like pieces of equipment, produce goods and services and jobs. Natural resource assets improve the quality of people's lives both indirectly (as in the case of parks and open space) and directly (as in the case of clean air and water). Similarly, other amenity resources -- theaters, museums, art galleries and so forth -- help define an area's quality of life: values that affect the decisions of entrepreneurs about where they will begin their enterprises, help companies retain employees in whom they have invested, make it easier for existing businesses to expand and attract the employees they need, and are becoming powerful attractors for new businesses.

Despite the increasing importance of amenity resources to state economic health and growth potential, few measures -- direct or indirect -- exist by which to compare states. No environmental measures are currently included in this subindex. The measures that are included are indirect at best, but provide a minimal sense of this capacity dimension. They include:

- *Doctors Per Capita*

Amid reports of communities advertising to attract doctors, the number of doctors per capita is clearly a useful, though incomplete, measure of the ability of residents to obtain basic medical care as well as an indirect measure of community well-being.

- *State Arts Agency Appropriations*

A state's commitment to cultural enrichment -- its legislative appropriations for a wide range of arts agencies and organizations -- has a significant effect upon whether people feel "this is a good place to live" and businesspeople feel "this is a good place to build a business." Pride of place is reflected in public art, architectural preservation, downtown revitalization, state or community symphony orchestra and ballet investments, among others, and the effect of these investments is felt well beyond state boundaries. Obviously, not all of the funds for the support of these amenity resources are public (see below), but state governments can set an example for the rest of the community to follow -- and they often do.

- *Distribution of Foundation Grant Funds*

Measuring the distribution of foundation grant funds by state helps to capture not just obvious amenity investments like those described above but also those other charitable, volunteer, and nonprofit activities that create an environment of caring and enrich both communities and the people who live in them -- from the youngest to the oldest. This measure gives us a way of beginning to understand what people mean when they say "there's a lot going on in this state."

Findings

The big story told by the overall Capacity Index findings is that the relationship between a state's economic performance and its development capacity -- particularly the education levels of its population -- is remarkably direct. The states that do well on one index are virtually identical to those that do well in the other. Stated somewhat differently, the states that currently are performing well appear to have the capacity to continue to hold their leads in the future.

The Northeastern states -- with their diversified, technology-enhanced economies, history of high investments in education at all levels, and high levels of wealth ("old money") dominate the top ten. The Northeastern states on the capacity "dean's list" include Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania and Delaware. Only rural and somewhat remote Vermont and Maine fail to make the list. At the southern boundary, Maryland and Virginia are not far behind the leaders. Three other states with similar profiles -- California, Colorado and Minnesota -- also are at or near the top.

The states with the poorest showing in development capacity are, once again, most southern states (Mississippi, Alabama, South and North Carolina, Arkansas, Kentucky, Tennessee, Georgia and Louisiana), several thinly-populated and relatively underdeveloped states (Maine, Nevada, West Virginia, Idaho, Utah and South Dakota) and one major industrial state, Indiana. Indiana would appear an odd candidate for the bottom of this list, given its moderate showing on most other indexes, but it has more in common with the southern states than with its northern industrial neighbors. What cripples Indiana -- and the other states at the bottom of the overall Capacity Index -- is a history of low investments in education and, consequently, low educational attainment levels, low research and development capacity, poor venture capital and lending records -- even in cases where deposits are relatively high -- and run-down infrastructure, all of which are illuminated by the rankings in the subindexes.

Human Resource Capacity Subindex Findings

The Human Resource Capacity Subindex is the driving force in the overall capacity rankings, reflecting the enormous impact measures like educational attainment and research and development levels have on future economic growth. And the leaders of this subindex are fairly predictable: the New England and Mid-Atlantic states, along with the other national economic leaders, California, Colorado, Minnesota and Wisconsin.

But there are some interesting stories hiding in the aggregate totals. For example, a high ranking in high school graduation rates does not imply a workforce that is capable of generating a lot of growth. Instead, states that have high levels of higher educational attainment, along with significant R&D investments, are more likely to see future growth, *even if they have a relatively high percentage of high school dropouts.*

California and Massachusetts, for example, score at the top of the overall index, even though they score poorly in high school graduation rates. The high achievers in these economies offset the drag caused by those who fail to complete high school. There are limits to this rule, however: several large industrial states (Michigan, Ohio and Illinois, for example) do not overcome the negative effects of high numbers of disadvantaged people with inadequate schooling, and their capacity rankings show it. Another story, perhaps less surprising, is that there is a high correlation between high school graduation rates and pupil/-teacher ratios: the more teachers, the more graduates.

Rankings in the human capacity index also reflect the R&D listings, and there are no surprises here either. The leading technology states, particularly New England, top these measures while the South dominates the bottom.

Financial Resource Capacity Subindex Findings

The Financial Resource Subindex proves the old rule: "It takes money to make money." The leading states in this subindex either hold a lot of "old money" (New York, Massachusetts, Illinois, Connecticut, Pennsylvania and New Jersey, for example) or have generated a lot of "new money" (California, Texas). But also near the top are several states that are not especially wealthy but use aggressively whatever capital they have (Arizona, Oregon and Kansas, among others).

Conversely, the states at or near the bottom of the Financial Resource Capacity Subindex either have a history of poverty and therefore limited investable capital (predominantly the South), or lack aggressive lending institutions and venture capital funds (Indiana, for example).

Infrastructure Capacity Subindex Findings

The top end of the Infrastructure Capacity Subindex says less about responsible infrastructure investment than it does about how long ago the leading states were settled. For the most part, the leaders in this index are relatively young, thinly populated, western states -- North Dakota, Nevada, Wyoming, and so forth. The second tier of states, those ranking between 10 and 20, include a number of states that possess airports that are "hubs" for major airlines, thus generating high airport use and, in association, high levels of air-related development activity.

The bottom of the list is dominated by older industrial states which have only just begun to address the development constraints caused by deteriorated public infrastructure (New York, Pennsylvania, Michigan, Indiana, Ohio, New Jersey and others), plus a second group of states that, while older in comparison to the western states that lead this subindex, are nevertheless still relatively underdeveloped in terms of infrastructure -- Missouri, Maine, West Virginia and several southern states.

Amenity Subindex Findings

The Amenity Subindex, as noted above, lacks important measures -- particularly of environmental quality -- and is given minimal weight in the overall capacity ranking. And yet it *does* present some useful findings.

The leading states in this subindex tend to be older industrial states in the Northeast and Great Lakes regions -- states with a lot of private and corporate foundations with substantial financial commitments to their communities. As a consequence these states score high on both the foundations measure and on the arts appropriations measure (in large part because many foundation grants require a public match). These same states also tend to be the ones with major hospitals and medical centers, increasing the proportion of doctors in the population. Had environmental measures been available, the positions of these states may have dropped somewhat, but while these states tend to have significant environmental problems, they also tend to be the ones doing the most about them.

Bringing up the rear of this subindex once again were southern states and the thinly--populated Great Plains and Mountain West states (Wyoming, Nevada, South and North Dakota, Nebraska and Montana). In the case of this latter group, inclusion of environmental measures might well have altered the results.

36. See, for example, Roger W. Schmenner, *Making Business Location Decisions* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982); Michael Kieschnick, *Taxes And Growth: Business Incentives and Economic Development* (Washington, D.C.: Council of State Planning Agencies, 1981); Takeshi Nakabayashi, "A Survey on Location Decisions of Japanese Companies in the U.S.," unpublished paper for Mt. Auburn Associates, March 1987.

37. See Edward Malecki, "Technology and Regional Development: A Survey," *International Regional Science Review* 8 (1983); and Edward F. Denison, *Trends In American Economic Growth, 1929-1982* (Washington, D.C.: The Brookings Institution, 1985).

38. U.S. Congress, Joint Economic Committee, "Location of High Tech Firms And Regional Economic Development," 1 June 1982.

39. Edward Malecki, "Public and Private Sector Interrelationships, Technology Change, and Regional Development," Papers of the Regional Science Association 47, 1981.

40. U.S. Congress, Office of Technology Assessment, *Technology Innovation and Regional Economic Development* (Washington, D.C.: Government Printing Office, July 1984); and U.S. Congress, Congressional Budget Office, "The Productivity Problem: Alternatives For Action," A CBO Study, January 1981.

41. Private research spending, though a critical measure, is often proprietary and therefore unavailable.

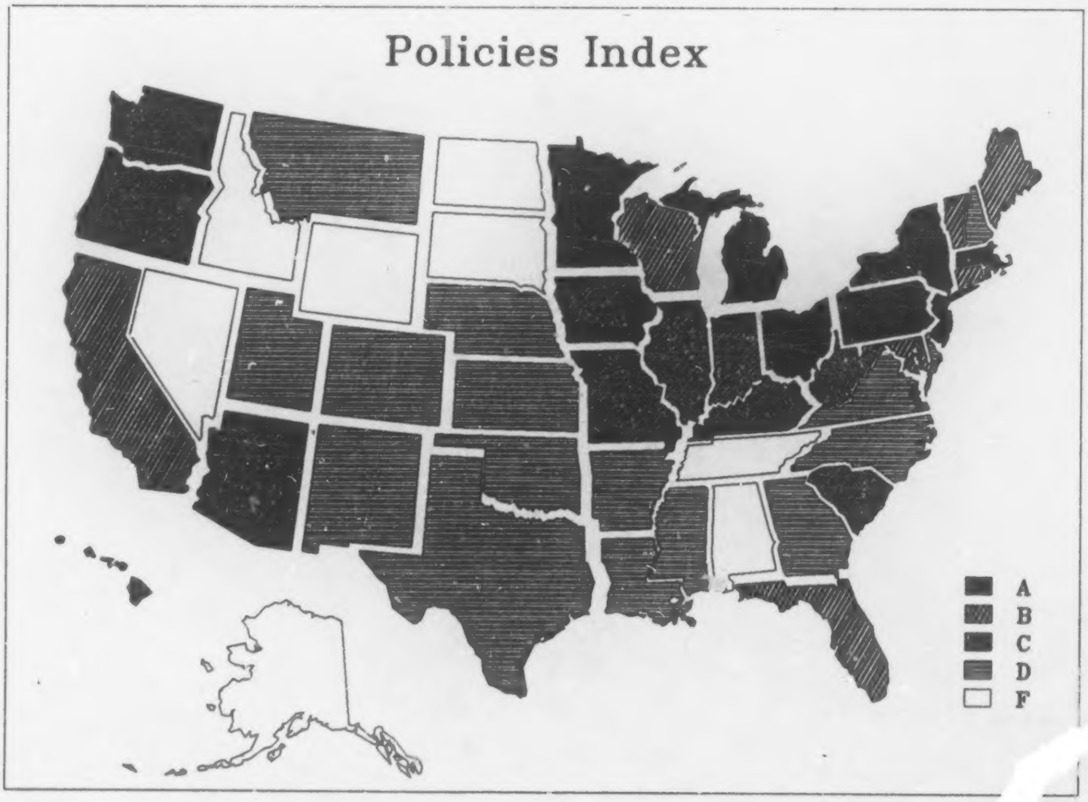
42. There tends to be a high correlation between this measure and states with a lot of "high tech" economic activity, making this a somewhat imprecise measure of overall entrepreneurship.

43. The Massachusetts Capital Resources Company, a publicly-chartered, privately-owned and managed consortium of nine Massachusetts-based life insurance companies, with more than $125 million of investment capital invested in small and mid-sized in-state businesses, is a major exception to this rule.

44. See Pat Choate and Susan Walter, *America In Ruins* (Washington, D.C.: Council of State Planning Agencies, 1981).

45. See Randall W. Eberts, "Estimating the Contribution of Urban Public Infrastructure to Regional Growth," Working Paper 8610, Federal Reserve Bank of Cleveland, December 1986.

Chapter Five: The Policies Index


Policies Index
A
B
C
D
F

Policy Index Report Card

	Ranking	Grade
Alabama	44	F
Alaska	49	F
Arizona	24	C
Arkansas	30	D
California	8	B
Colorado	30	D
Connecticut	12	B
Delaware	30	D
Florida	13	B
Georgia	30	D
Hawaii	23	C
Idaho	44	F
Illinois	15	C
Indiana	24	C
Iowa	15	C
Kansas	30	D
Kentucky	15	C
Louisiana	30	D
Maine	10	B
Maryland	10	B
Massachusetts	6	A
Michigan	1	A
Minnesota	3	A
Mississippi	30	D
Missouri	15	C
Montana	30	D
Nebraska	30	D
Nevada	44	F
New Hampshire	42	D
New Jersey	7	A
New Mexico	27	D
New York	3	A
North Carolina	30	D
North Dakota	47	F
Ohio	2	A
Oklahoma	30	D
Oregon	15	C
Pennsylvania	3	A
Rhode Island	24	C
South Carolina	15	C
South Dakota	43	F
Tennessee	49	F
Texas	27	D
Utah	30	D
Vermont	13	B
Virginia	27	D
Washington	15	C
West Virginia	15	C
Wisconsin	8	B
Wyoming	47	F

One of the great ironies imbedded in the traditional definition of "business climate" is that its proponents -- those who would rate a state on the basis of the number and size of the financial and other "sweeteners" it is willing to hand out to attract industry -- are often the same people who argue that government ought to "get out of the way" of business.

Today, however, rapid changes in the domestic and global economic environment have rendered this quaint contradiction an artifact of the past. The stark realities of international competition and the dramatic shift in governmental responsibilities brought about by the Reagan Administration's "New Federalism" have made state governments principal players on the nation's economic stage.

In response, there has been a quiet revolution in state economic development policymaking.[46] State agencies that only a few years ago did little more in the way of economic development than "smokestack chasing" -- trying to lure manufacturing plants away from other states -- today wield a comprehensive box of policy tools by which to spur entrepreneurship, help improve the skills and adaptability of workers, speed technological innovation and strengthen the competitiveness of "home-grown" businesses and industries and the communities in which they are located. These policy tools, often developed cooperatively with industry, include tax and regulatory reform, development finance programs, domestic and international market development, state-funded research and development, revitalized education and training programs, new labor-management experiments and long-term infrastructure investments. They reflect the new roles of state government described earlier in Chapter Two -- as broker, catalyst, investor, regulator and stabilizer.

These policies and programs are linked by common themes:

- They are *market perfecting*, recognizing both the power and effectiveness of private markets as well as their limitations, and designed to remedy market failures that keep economic opportunities from expanding and being shared by all.
- They are *investment oriented*, assuring that resources are invested now so that the foundations for growth are in place in the future.
- They are *people centered*, based on a new understanding that the central dynamic in a changing economy is people with ideas about how to do something better.
- They are shaped by *public-private cooperation*, by leaders who recognize that we live in one economy -- part public, part private -- which has become so complex that success can only be assured by joint action.
- They *cross political lines*, and are being pursued by both Republican and Democratic, liberal and conservative state policymakers.

The number of individual initiatives undertaken by states in just the past few years is high. Evaluating their effectiveness is complicated by a general lack of consistent cost data and the difficulty of establishing direct links between cause and effect. Moreover, none of these initiatives alone is capable of thrusting a state into the forefront of prosperity. Instead, they act at the margin, gradually improving the competitive position of the state.

While it is clearly impossible to "rate" each initiative, given the very different economic circumstances in each state, our simple yes/no tally provides a useful measure of the relative commitment of different state governments to improving the overall environment for business growth. What we measure is level of effort, not necessarily quality of effort.

Seven broad categories, or subindexes, of initiatives have been used. While states were canvassed for several of these subindexes, this index also relies (to a greater extent than earlier indexes) upon information surveys conducted by other reputable organizations and institutions.[47] Even these conscientious surveys may miss some initiatives — especially newer ones or those which are carried out primarily by private actors with state support. The seven Policies subindexes are:

1. Improving Governance and Regulation;
2. Creating an Equitable and Efficient Tax Code;
3. Mobilizing Capital;
4. Enhancing Technology and Business Development;
5. Building and Maintaining Public Works;
6. Investing in Human Resources; and
7. Helping Distressed Communities.

An eighth subindex, "Investing in Natural Resources," designed to illuminate a state's quality of life -- an increasingly important business development factor -- is still being developed and will be added next year.

The process of deciding whether a given state initiative should be included was guided by several key questions: Can the initiative have a significant impact on the state's economy? Is the initiative targeted at an important barrier to or opportunity for growth? Given the limits of state resources and the need for partnerships with private actors, did the initiative leverage significant private investment? Is it likely to enhance the equitable distribution of economic opportunity? Is it readily implementable? Does it reduce barriers to growth? Does it empower communities and individuals to improve their own economic condition? Is it politically pragmatic and administratively feasible?[48]

Subindex One: Improving Governance and Regulation

If state governments are to be full partners in the development process, the quality of public sector analysis, decisionmaking and management must be as good as the best in the private sector.

As states wrestle with complex economic challenges from functional illiteracy to plant closings, from youth unemployment to the development of new international markets, governance that is more efficient, more farsighted, and more strategic in approach has become increasingly important. Indeed, better governance has been part of the formula for many of the states that have recently shown impressive economic gains. Five indicators can be used to help measure the extent to which a state is trying to improve governance, particularly with reference to economic development: (1) the capacity to scan the economic horizon and analyze emerging problems and opportunities likely to affect the state's development objectives; (2) the conduct of a strategic audit of the state's development liabilities and advantages; (3) review and reform of regulations; (4) creation of an institutional mechanism for collecting and analyzing economic information, designing public strategies, and coordinating multi-agency responses; and (5) instituting mechanisms for monitoring, evaluating, reforming, and terminating economic development programs.[49]

- *Improving Government Foresight*

The Council of State Policy and Planning Agencies, of which virtually all states are members, has developed a *State Scanning Network* designed to identify and assess emerging trends of concern to states. Currently nine states (Colorado, Florida, Minnesota, Missouri, Nebraska, New Jersey, North Dakota, Oklahoma and Pennsylvania) participate. Staff in each state review hundreds of information sources for emerging issues. The results of these state scans, augmented by scans conducted by private corporations which are also members of the Network, are reviewed every second month by a distinguished National Scanning Board, which selects the most significant issues and prepares a summary "Report To The Governors." Scanning Board staff then assemble a data base to track each issue, creating a reference bibliography, a list of experts on the issue and, where applicable, examples of successful intervention. The data base is immediately accessible to participating Governors' offices.

The *State Scanning Network* is the only public sector "early warning" system of its kind, and one of only a few so comprehensive in the private sector. States which are members are afforded a powerful system for identifying, anticipating, and addressing in a timely manner a wide array of economic problems and opportunities. Those states possessing this capability have a substantially greater governance capacity than those which do not.[50]

- *Conducting Strategic Audits*

A variety of tangible barriers to economic development -- capital, management, labor, technology, markets and taxation -- are either determined by, or capable of being influenced by, public action. If these barriers can be lowered, opportunities for entrepreneurship and business growth can be enhanced, increasing employment, innovation, and many other components of economic vitality. State governments that undertake a careful audit of these potential barriers -- and several leading states have done so -- advance their development prospects in two ways: they understand and can directly address the stumbling blocks to growth, and they more clearly understand their own comparative advantages in the competition for growth.

- *Regulatory Review and Reform*

State regulation of the private marketplace is an economic fact of life. Regulations exist to protect the health, safety, and economic welfare of a state's residents from the flaws in efficiency and equity inherent in the normal operation of the private market economy and from the occasional abuses of the private market economy and the public trust by the unscrupulous.

But, built up as they are layer by layer, year by year, many regulations are no longer relevant to current situations. Many are poorly and unevenly administered, resulting in uncertainty and costly delays. Many are duplicative, even contradictory. Some have more to do with the distribution of political interests than of social or economic concern.

Increasingly -- and particularly as the overall quality of life in a state or community becomes a more and more important business location factor -- businesspeople are concerned less about the *fact* of regulation than about the *administration* of regulation. Regulatory review and reform -- not to be confused with regulatory "relief" -- have become significant elements of state economic development programs. States have undertaken comprehensive regulatory reform studies, established "one--stop" permitting offices to which businesses can come for guidance and assistance, streamlined permit applications and related paperwork, guaranteed review and decision timetables, ensured that permit costs cover administrative expenses so that permittees are assured reliable and timely decisions and created ombudsman's offices to handle questions and complaints.

One of the most positive outcomes of regulatory reviews, (and this has been the case in a number of reviews of workers' compensation regulations) is their ability to separate myth from reality. The process of information gathering, analysis, discussion, and decision, particularly when these reviews are conducted by special study commissions composed of key constituencies, can diffuse long-standing feuds and significantly improve cooperation, support and trust between businesspeople and government officials.[51]

The objective of these activities, and the purpose of this subindex, is to indicate clearly the regulatory concerns of the state and assure businesses a fair and equitable process for reviewing and approving their development proposals -- in short, minimizing pain and uncertainty and cementing the partnership relationship between private and public actors in the economy.

As a proxy for regulatory review and reform, this indicator simply identifies whether a state has established a one-stop permitting system.

- *Creating A Development Cabinet*

State governments, like most private corporations, are organized along functional lines, with separate line agencies responsible for specific purposes -- education, commerce, natural resources and so forth. But economic development has no respect for agency responsibilities. Because they so often cross agency lines or "fall through the cracks," many development opportunities are missed and many problems go unrecognized, until they become crises. Moreover, in the tradition of all bureaucracies, public and private, timely action is often frustrated by turf squabbles and by endlessly fighting the last war instead of anticipating the next one.

To short-circuit these problems, several states have established economic development cabinets or sub-cabinets, often with independent staffs, to anticipate cross-cutting issues or opportunities, collect and analyze information, develop strategies and coordinate comprehensive, multi-agency responses to development issues. States possessing this institutional capability present more coherent responses to the challenge of competitiveness than those that do not and, as a consequence, tend to have more vital economies.[52]

- *Improving Oversight*

Perhaps the most positive effect of the shift of responsibility for many economic policymaking responsibilities from the federal government to the states is the rapid increase in the professional analytic capabilities of state legislatures. A key new function is the legislative audit, by which legislative staff monitor the performance of agencies carrying out legislatively mandated programs to assure that they stay on track, are cost-effective, and remain relevant. Important improvements have been made in oversight and accountability and in review and evaluation. The process works on two levels. At the program level, auditors monitor the effectiveness of specific initiatives: Is the seed capital fund meeting its intended objectives and recycling its funds? Is the incubator facility effectively overcoming the space difficulties faced by fledgling companies? At the strategic level, auditors address broader questions: What market barriers hinder development and are amenable to state action? Is a given program effective but in need of being supplemented? Are some initiatives so successful that next steps need to be mapped out? Or has a program done its job so well that it is time for it to be terminated?

States whose legislatures have developed a professional analytic staff with defined audit responsibilities are more aware of the effectiveness of the existing investments in economic development and, as a consequence, are more sensitive to the effects on the business community of state actions and quicker off the starting blocks with new initiatives when a need is identified.

Subindex Two: Creating An Effective And Equitable Tax Code

A great deal of recent research has shown that, despite the tendency of governments to use tax abatements and incentives to lure new business, state and local taxes have very little effect on business development. Three-quarters of new jobs come from in-state businesses that do not even shop among states. Even for that minority that does, taxes have been shown to have little impact on the profitability of businesses and receive little consideration in business location decisions. Other location factors, such as proximity to markets and quality of life for employees, are more important according to business executives and frequently overwhelm whatever advantages may be created by tax differentials.

But that doesn't mean that state taxes and fiscal policies don't affect the economic climate for business in the state. Stable and attractive conditions for enterprise development depend to a significant extent on the establishment of effective, efficiently administered and equitable tax policies that further:

- Fiscal stability and balance. Use a balance of different taxes to create stable revenue base, which can support a consistent level of public services and investment;
- Tax Fairness. Treat taxpayers fairly and are minimally regressive; and
- Fiscal Equalization. Assure that communities have relatively equal ability to deliver essential services.

- *Tax Climate.* The tax subindex calculates a total score, taking into account measures of each of these three indicators.[53]

Subindex Three: Mobilizing Capital

Financial capital is the "grease" that keeps economic machinery turning smoothly. When capital does not flow to its most productive uses, for whatever reason, the machinery slows: jobs are not created, new technologies are not developed and commercialized, the higher economic returns delivered by new or expanding enterprises do not occur, and the economic health of communities and states suffers.

Existing financial institutions -- commercial banks, insurance companies, venture capitalists, investment bankers, and others -- do a pretty good job of assuring the availability of capital for large, established corporations. But an increasing body of evidence indicates that these institutions fail to provide appropriate kinds and amounts of capital to the very enterprises that create the majority of the new jobs and economic energy in today's economy: new and young businesses, rapidly expanding businesses, businesses in new economic sectors, businesses located in depressed communities, minority or women-owned businesses, and businesses with non-traditional management structures -- cooperatives, worker-owned firms, non-profits and community development corporations.[54]

The reasons for the unavailability of capital for such enterprises are many. An unwillingness or inability to diversify risk makes some capital sources risk averse. The difficulty and cost of acquiring adequate information on new, young or small firms discourages such investments. The cost of putting deals together can make a few large deals more profitable than many small ones. Political, geographic, racial and sex biases exists. And public regulatory and taxation policies -- "legal list" requirements, barriers to risk pooling, usury ceilings and the like -- may simply prohibit existing institutions from making capital available to some enterprises, regardless of their soundness and future growth prospects.

But sheer availability is not the only problem. The *kinds* of capital -- long-term debt, short-term debt, subordinated debt, equity, near-equity and others -- are also often inadequate. A firm needs different kinds of capital at each stage of its life -- research, product design and development, startup, expansion and so forth. If capital is generally available, but not in the right form, it might just as well be unavailable.

To overcome the limitations on economic development caused by capital market failures, state governments have developed a variety of financial innovations. This subindex gathers these innovations into three categories: (1) changing state financial regulations to redirect the investments of private financial institutions, (2) providing loan guarantees and other risk insuring mechanisms, and (3) creating new public or publicly-chartered financial institutions to fill gaps in the private capital marketplace. The mix of tools varies with the economic conditions that apply in each state. For example, a state with unit banking, an agriculturally-based economy, and no indigenous venture capital industry will have different needs than one which is highly-urbanized, has a substantial venture capital industry, and needs to revitalize depressed communities.

Reforming Finance Regulations

Four of the five trillion dollars in the U.S. economy are controlled by financial institutions that are licensed and regulated by government -- banks, savings and loans, insurance companies and pensions funds. As a consequence, any effort to enhance the attractiveness of the state's economy for business development that fails to address the investment practices of these institutions will be marginal. By the same token, any policy that makes even a small change in the investment practices of these institutions will have a dramatic effect on the availability of capital to businesses in that economy.

These regulatory reforms are among the most direct ways that state governments can improve the capital environment -- and thus the health and attractiveness -- of their economies. This category examines specifically whether state law permits interstate banking and pension fund investment in venture capital and whether states have their own versions of the Community Reinvestment Act of 1977.

Statewide Branch Banking

A variety of state policies can limit the availability of capital from these institutions. Regulations that prevent the entry of new banks into a community, for example, limit competition and the kind of aggressive lending practices that competition stimulates. Many states have lifted intra- and interstate banking restrictions recently to overcome this problem.

Community Reinvestment Act

In addition, some states have enacted their own versions of the federal Community Reinvestment Act of 1977 in an effort to ensure that banks meet the credit needs of the businesses in the communities in which they are chartered. The Massachusetts version, for example, requires them to demonstrate that they serve the convenience and needs of the community and its businesses not just for deposit services but credit services as well.

Pension Funds

State and local regulation of public pension funds (which in fifteen years will total more than a trillion dollars) often restrict or prohibit investment in the very communities in which fund contributors live. In some cases statutory lists specify where pension funds can be invested. To free at least some of these resources, while protecting the integrity of the funds, many states have either eliminated the lists altogether, substituting the "prudent investor" language in the federal Employee Retirement Income Security Act (which governs private pension fund investment practices) that would permit investing a portion of fund assets in qualifying in-state businesses. Others have modified the lists to permit some in-state investments in corporate equities, small businesses, SBA loans, limited partnerships with venture capitalists and affordable housing.

Insuring Against Risk

Guarantees

When their economic development objectives are frustrated by the private financial community's perception of risk, many states have responded recently by offering to absorb some or all of that risk, thus enhancing creditability. Using loan guarantees, credit insurance, and secondary markets, among other devices, to eliminate the risk exposure of private investors in the (usually very unlikely) event of default, the state is able to achieve its public objectives with private money. Many states have established one or more such guarantee programs to spur private investments in everything from housing developments to beginning farmers. To the extent that such programs increase the availability and accessibility of capital for indigenous businesses, at minimal state cost, the state's ability to support new development is substantially enhanced.

Creating New Institutions

When all else fails, states have created public, or publicly-chartered private, institutions to channel capital to businesses or communities that private financial institutions have failed to serve. Some of these institutions are capitalized by state appropriations, some by private investors who are offered some special incentive (like a tax credit), and some by leveraging both federal and private funds.

While the forms these institutions have taken, and the track records of their investments, have varied, the best of them have (1) supplemented rather than substituted for private markets, targeting their limited resources to clearly-identified capital market gaps; (2) increased the accessibility of capital to businesses, rather than subsidizing its cost; (3) provided the kinds of capital (e.g. equity, long-term debt) that private capital sources have failed to provide to new, young, and small businesses; (4) leveraged a great deal of private money with a small amount of state money; and (5) demonstrated the economic viability of enterprises that private markets found too risky, eventually shifting future financing of such enterprises to private institutions.

Such institutions not only improve the chances for new and existing businesses to thrive in the states that have established them, but they also send a signal loud and clear that the state is prepared to ensure that capital is equitably distributed to qualifying enterprises, and to create the financial environment necessary to ensure the successful long-term growth of its businesses.

A wide range of institutions have been created, including:

- *Quasi-Publics.* May include publicly capitalized venture capital corporations;

- *Business Development Corporations.* BDCs are publicly chartered and privately managed.

- *Loan Funds.* Governmental lending programs.

- *Business and Industrial Development Corporations.* (BIDCOs)

Subindex Four: Enhancing Technology And Business Development

As state officials recognize the importance of technological innovation, entrepreneurship, and effective business management in economic growth, they have taken a variety of steps to create the conditions under which these components of growth can develop. Where states have attempted by these efforts to duplicate the formula for growth that has worked somewhere else (like California's Silicon Valley) these efforts have wasted large quantities of scarce public funds. However, where states have used these efforts to strengthen their own comparative economic advantage (as in the case of Michigan's machine vision or robotics industries), important progress has been made in improving the vitality of the state's economy.

Most of the initiatives undertaken to date fall into one of four categories: (1) creating new research and development centers, (2) creating technology transfer centers, (3) establishing small business development centers, and (4) creating small business incubator facilities.

- *Creating Research and Development Centers*

The link between first-class university research and the creation of "cutting edge" businesses has been made abundantly clear by recent research.[55] Consequently, a number of states have moved to finance the creation of advanced technology centers -- like Pennsylvania's Ben Franklin Partnership and Ohio's Thomas Alva Edison program -- to build on existing comparative advantages. Often the funds appropriated to build such centers, support research, endow faculty chairs or provide graduate student fellowships, have required matching private sector investments.[56] For businesses already pursuing related lines of research, and for entrepreneurs capable of using such centers as springboards for the development of new products or processes, such state investments present opportunities for tangible, if long-term, economic growth. Moreover, given the importance of the rapid development and commercialization of technology to gaining and keeping a competitive edge in today's economy, such investments may be crucial to assuring future economic opportunity.

- *Establishing Technology Transfer Programs*

Several creative states have established new technology transfer programs designed to identify promising new university research and move it toward commercialization, solve technology-related problems of corporate clients, and help existing industries become more competitive through retooling. (Because these programs, as well as the research and development centers noted above, are still quite new, this subindex simply identifies their existence; it does not attempt to evaluate them at this stage.)

- *Establishing Small Business Development Centers*

For would-be entrepreneurs and for small businesspeople who want to expand, frequently the biggest stumbling block is simply not knowing where to start. To remedy this problem, many states, in cooperation with the U.S. Small Business Administration, have established small business development centers to provide business creation and management assistance and increase the state's "entrepreneurial yield." As the evidence continues to grow that virtually all the net new jobs in any state economy are created by businesses and entrepreneurs already living in the state, the value of these centers for strengthening the state's economic future continues to grow as well.

- *Creating Small Business Incubators*

The idea behind the many small business incubator facilities that recently have been established is that the likelihood of success of new small businesses can be increased by helping them overcome common barriers: poorly developed management skills, the absence of business support infrastructure, the shortage of accessible, appropriately sized and affordable industrial and commercial space, and the unavailability of risk capital.

Such facilities, which may be established and run by a state or simply assisted by it, provide the facilities and services most commonly lacking in new businesses: parking, security, cleaning, telephone switchboard, reception, meeting rooms and, in some specialized examples, testing facilities. The state may build, donate or underwrite the development of the facility, absorb some operating costs, and even offer seed capital and other forms of startup financing. The exact mix of facilities and services varies from incubator to incubator, depending on its purpose. But as with the other indicators in this subindex,the overarching purpose is to increase the success rate of new businesses and, in the process, increase the vitality of the state's economy overall.

Subindex Five: Building and Maintaining Public Works

One of the great ironies of today's economy is that the public works infrastructure -- roads, bridges, water and wastewater systems, solid waste systems, public buildings, dams and prisons -- is deteriorating just as businesspeople have begun to identify these same facilities as crucial to their location and development decisions, and thus crucial to the economic future of the state.[57]

- *Capital Budget*

Federal funds for such facilities -- funds which have always tended to emphasize new construction over repair and maintenance --

are drying up, and the burden for the upkeep of these facilities and services, the foundation of the economy, is shifting to state and local governments. While most states continue in the age-old practice of cutting repair and maintenance investments every time there is an annual budget crunch, a few leading states have conducted infrastructure investment need surveys and developed specific capital budgets to ensure that these investments are made. While the existence of a capital budget does not guarantee adequate investment in public infrastructure, it at least removes the issue from annual operating budget squabbles and introduces a degree of commitment in support of long-term economic stability and growth that states lacking capital budgets cannot claim.[58] We therefore measure whether or not states use a capital budget.

Subindex Six: Investing in Human Resources

In response to the increased national awareness of the direct link between international economic competitiveness and investments in the education and skill levels of the workforce, states have undertaken a range of new initiatives aimed at (1) strengthening public education and the preparedness of the next generation, (2) increasing the skills and productivity of labor and management in the current generation, and (3) restructuring transfer payment programs -- income maintenance and job training, for example -- to enhance the employability of those bypassed or sidetracked by a changing economy. This subindex examines state initiatives in each of these categories.

■ Strengthening Public Education

At the most basic level, strengthening public education means strengthening teachers. And even before several national studies highlighted the need for public education systems to be upgraded, a number of states had already begun implementing new programs to address that need. Across-the-board pay increases for teachers have been instituted, to reflect their importance to the state's economic future. New in-service training programs have been initiated. New career ladders have been established to increase opportunities for mobility. New (and still controversial) evaluation systems have been developed. Performance-based pay increases have been established.

In addition, the rigor of the educational experience is being toughened. High school graduation standards have been stiffened. And a number of districts are experimenting with longer school days and even year-round schooling.

These measures are costly. It has been estimated, for example, that raising teachers' salaries nationwide by 20 percent would cost some $12 billion. But public officials and taxpayers have signalled their willingness, even determination, to make such investments to reverse what is perceived to be a marked decline in the quality of public education and, by extension, the ability of the next generation of workers, managers and entrepreneurs to compete successfully. This subindex measures but a few of these initiatives:

- *High School Graduation Standards;*
- *Teacher Career Ladder Plans;*
- *Entrance Testing Certification for Teachers;*
- *Computer Literacy;* and
- *High School Graduation Testing.*

■ Labor-Management Improvement Assistance

Increasing labor productivity, overcoming skill shortages, increasing the flexibility and adaptability of worker skills and strengthening the ability of managers to identify and fully utilize the talents of their employees are crucial to increasing the competitiveness of the economy. Several states have taken steps to assist in the restructuring of labor-management relationships.

- *Labor-Management Assistance Programs*

While the range of such activities is broad, the most direct and potentially most effective initiative has been the creation of offices within state government dedicated to business-labor outreach and education programs, providing small seed grants for labor-management improvement programs and local labor-management councils, trouble-shooting and providing direct staff assistance, sponsoring conferences and seminars and acting as clearinghouses for information on labor management productivity and quality of worklife improvements. This indicator identifies the states which have established such programs.

■ **Transfer Payment Investment**

Traditional business climate definitions regard transfer payments -- welfare, unemployment compensation, social security and medicaid -- as drags on the economy. In fact, however, such payments stabilize the economy by maintaining purchasing power, conserving human capital, maintaining basic standards of living and income for those dependent upon them and -- particularly in rapidly changing economies -- reducing resistance to productive change. Transfer payments can, however, be even more effective contributors to economic development if, instead of penalizing recipients for moving on to self-sufficiency (as they now often do) they are used to encourage and support training, education, employment and self--employment.

- *Transfer Payment Investment Efforts*

In this subindex we assess state efforts to reform the current basic welfare (AFDC) system[59] to promote economic independence, as a proxy for comprehensive transfer payment investment.[60] Included are: state commitment to the JTPA Title II-A Job Training Program; state support for the child care and medical coverage needs of reemployed AFDC clients; state AFDC grant diversion programs designed to turn income maintenance payments into hiring incentives; state commitment to innovation, measured by participation in optional welfare reform demonstration projects under Sections 1115 or 445 of the Social Security Act; and state AFDC benefit levels.

Subindex Seven: Helping Distressed Communities

When it comes to the distribution of the benefits of economic development, all communities are not created equal. A state undergoing steady economic growth may nevertheless have communities hard hit by plant shutdowns. A mature industry in the throes of retooling to become competitive again may generate significant short-term, and even long-term, unemployment. Some communities are simply locked in chronic poverty and are consistently bypassed by economic development. If the broad purpose of economic development is to provide everyone an opportunity for a better life, and if the attractiveness of a state for new economic development is determined in large part by the extent to which it is capable of providing that opportunity, then states that work to help these distressed communities will be more vital and more attractive for future growth than those that do not.

While the specific programs needed to address the problems of chronically distressed communities will differ from case to case, five types of policies serve as useful indicators of a state's commitment: (1) supporting community economic development programs, (2) creating minority enterprise programs, (3) investing transfer payments in economic development, (4) expanding employee ownership, and (5) establishing rapid response teams to address plant closings and related dislocations.

Supporting Community-Based Development

Community-based organizations can play a key role in delivering a wide range of services critical to the revitalization of economically--distressed communities: loan packaging, fund-raising, development planning, providing technical assistance to small businesses, developing and managing incubators, sponsoring real estate development projects, developing social service enterprises and investing directly in small firms, among others. While no single community organization can undertake all these initiatives, several such organizations can effectively catalyze community economic renewal and stimulate widespread local participation.

Three general types of public support increase the effectiveness of community revitalization programs: (1) a Community Enterprise Economic Development (CEED) program, which provides small grants for community economic development corporations, pre-venture startup costs and general administration expenses; (2) a Community Economic Development Assistance Corporation (CEDAC) which provides training and more sophisticated project assistance to community development corporations; and (3) a Community Development Finance Corporation (CDFC), a wholly state-owned venture capital firm targeted specifically to finance community development corporation ventures. Few states provide such comprehensive support. But even providing limited grant and technical assistance can increase the ability of communities to rebuild and, in so doing, enhance the overall health of the state economy.

Creating Minority Enterprise Programs

Increasing conventional for-profit entrepreneurship in distressed communities is an excellent way for providing economic opportunity to individuals long out of the economic mainstream, while at the same time decreasing the attractiveness of the underground economy. Most self-employment and entrepreneurship arises out of economic and personal dissatisfaction, but there are significant barriers to low-income enterprise development that frustrate the widespread development of entrepreneurship in distressed communities. Focused state programs to unleash the promise of minority entrepreneurship -- by increasing access to seed capital from either public or private sources, providing management training and technical assistance and contracting for state procurement -- can go a long way toward generating economic energy in distressed communities.

Expanding Employee Ownership

In communities threatened by the closing of a plant that no longer fits its corporate owners' strategic plan but is otherwise a going concern, employee ownership and operation can be an economic lifeline.[61] Besides preserving jobs, such ownership tends to improve productivity, provide income beyond wages and enhance local control over economic development.

Six states have established comprehensive employee ownership assistance programs providing technical assistance, establishing education programs to prepare employees for ownership and management responsibilities, and providing loans, loan guarantees and tax incentives that can make such ownership programs possible.

In much the same way that state programs to support indigenous businesses strengthen the overall economic vitality of the state, employee ownership programs, where applicable, strengthen the economic viability of communities that depend upon threatened businesses. They keep such communities from becoming distressed in the first place.

■ Establishing Rapid Response Teams

When a major plant is closing and employee ownership is not an option, communities face rapidly escalating service demands in the face of a sharp drop in tax revenue from the closing plant. State-sponsored rapid response teams can lessen the toll on workers, their families, other businesses and the community as a whole. The ultimate purpose of such teams is to smooth, to the extent possible, the inevitable bumps encountered by people and communities in an economy that is undergoing rapid change. States that have such programs in place will be more capable of adjusting to these changes than those that do not. Consequently, they offer more attractive prospects for future economic development.

- *State Rapid Response Teams*

Twenty-one states have established such teams, funded by federal Job Training Partnership Act funds along with other resources, in order to determine the magnitude and nature of the likely dislocation, develop a strategy for providing coordinated state assistance, inventory existing public and private monies and expertise, design new training, social service and business retention, and evaluate the results.

- *DOL Project Participation*

Six states are also participating in a joint National Governors' Association/U.S.Department of Labor programs to test the application of a Canadian industrial adjustment service for the retraining of dislocated workers.[62]

Findings

While the Policy Index covers an enormous number and variety of state economic development programs, the results -- what the index does and does not indicate -- are startlingly simple.

What the Policy Index shows is where the states stand in the historic and ongoing process of economic restructuring, and how aggressively each state is responding to the challenges that restructuring has created.

What the Policy Index does *not* show -- surprisingly -- is any significant political or ideological pattern to the responses states have made.

It is worth noting, once again, that the pace of state policy innovation is rapid, that state administrations change rather frequently, and that in any given state all of the programs and policies in place today may not be reflected in this index. But, in a sense, perfect accuracy is unnecessary here. What we are trying to gauge is level of effort: Is a state doing most of the things it could do to enhance the vigor -- and by extension the "attractiveness" -- of its economy? Some of the things? Very few of the things?

Analysis of the results of the policy index reveals several interesting stories. While only a decade or so ago industrial recruitment was virtually the only kind of "economic development" conducted by states, today the majority of states are involved in a wide array of often quite imaginative initiatives aimed at strengthening their own "home-grown" businesses. In many cases -- perhaps in all -- it has been a case of necessity mothering invention.

It is no coincidence, for example, that the states with the greatest number of initiatives in the Policy Index -- Massachusetts, Michigan, Minnesota, New York, New Jersey, Ohio and Pennsylvania -- are the states that have been hit hardest by the rapid and disruptive restructuring of America's industrial economy. The pioneer both in terms of disruption and response has been Massachusetts, a state in dire economic straits in the 1970s and the "king of the hill" today.

Following in its footsteps, and the beneficiaries of its successes and failures, are the other industrial giants of the Northeast and the "Rust Belt" -- states both Republican and Democratic, liberal and conservative. With the real prospect that the "Rust Belt" was becoming the "Bust Belt," it was clear to all concerned that something dramatic needed to be done. In the face of extreme economic distress, ideology has played no significant part.

It will take time -- years in the case of improvements in education systems, for example -- for many of the policies and programs listed in this Index to begin to show

results. But to the extent that the programs and policies adopted, or adapted, by these states are aimed at strengthening their own individual competitive advantages, rather than simply cloning some other state's programs, it is reasonable to expect that in a few years the results may be not unlike those of Massachusetts today.

In short, watch out for the "Rust Belt" states: they are moving.

In the second tier, in terms of the number and variety of development programs and policies in place, are two kinds of states: those determined to maintain their already significant competitive position (for example, California, Florida, Maryland and Connecticut) and two still looking for their first big burst of growth (Maine and Vermont) and hoping to build upon and share in the success of their neighbors.

Given the almost universally dismal showing of almost all of the southern states in the three other indexes of this *Report Card*, it might be reasonable to expect them, once again, to be bringing up the rear in the Policy Index. Not so.

The bottom of this index is dominated by the thinly-populated and relatively undeveloped Mountain West and northern Great Plains states -- Wyoming, North and South Dakota and Idaho -- states that have had modest economies that, until the recent collapse of the farm sector, had been bypassed by the wholesale industrial restructuring experienced by more developed states. They haven't needed much in the way of development policy, and they haven't done much.

The southern states, on the other hand, appear to have seen the writing on the wall. Faced with the ever more limited returns from their long-standing industrial recruitment strategies and the bankruptcy of most of the measures of capacity, the South (with the possible exception of Alabama and Tennessee) is rebuilding. With the assistance of the Southern Growth Policies Board and its Commission on the Future of the South, southern states are strengthening their own governmental institutions, investing heavily in education reform, providing new support for indigenous businesses, and stressing the development and application of new technologies in both existing and new businesses.

In the South and in all of the states working to strengthen the competitiveness of their economies and their ability to produce expanding and shared opportunity there is a clear hierarchy of initiatives. Educational reform is preeminent. Small business development and technology development are close behind. Mobilizing needed capital -- particularly if we except conventional tax-exempt bonding -- is unevenly pursued, reflecting in some cases the wealth of the state and in others the willingness of state officials to become active capital market actors. Infrastructure improvements are often called for but action is slow in coming and capital budgeting systems for such investments are still relatively rare. And finally, efforts to bring distressed communities and the people who live in them back into the economic mainstream are very limited indeed.

If the lessons of the past -- illustrated in the first three indexes -- are any guide, however, states which invest in capacity building can expect to see positive long-term results in the vitality of the businesses in their economies and the performance of the economy as a whole -- concrete progress toward expanding shared economic opportunity and creating attractive environments for economic growth.

46. For an excellent overview of this "revolution," see Roger Vaughan, Barbara Dyer, and Robert Pollard, *The Wealth Of States: Policies for a Dynamic Economy* (Washington, D.C.: Council of State Policy and Planning Agencies, 1986); The Corporation for Enterprise Development, *Building The New Economy: States In The Lead*, David R. Jones, Editor, (Washington, D.C.: Corporation for Enterprise Development, 1986); Marianne Clarke, *Revitalizing State Economies: A Review of State Development Policies and Programs* (Washington, D.C.: National Governors' Association, 1986); and Scott Fosler, *Partnership For State Economic Progress* (New York: Committee For Economic Development, April 1986).

47. The National Governors' Association and National Council of State Legislators, among others.

48. A methodological note in the Appendices explores these issues in more detail.

49. This is one of the most difficult areas in which to collect accurate and timely information; ultimately, quality judgments -- which we did not make -- are very important for several of these indicators.

50. Some states do issues scanning on their own, but the power and comprehensiveness of the State Scanning Network simply overshadows isolated efforts.

51. The Massachusetts Commission on Workers' Compensation, which had the involvement and support of labor, industry, and the legal profession, is a good example. The Commission overhauled the state's workers' compensation laws, raising benefits, restructuring the system for awarding benefits, instituting a direct pay system, authorizing group self-insurance and reorganizing the agency responsible for the program. An advisory council was established to monitor implementation and conduct ongoing research.

52. However, such mechanisms often change whenever a new governor is elected, so results may not be entirely accurate. Moreover, this measure says nothing about the extent to which these mechanisms are empowered to achieve the end for which they were created. Performance varies.

53. For more background on business climate and taxes, see Karl Seidman, "The Role of Taxation in State Business Climate," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987; and The Corporation for Enterprise Development, "Business Climate Tax Index," Economic Climate Project, The Corporation for Enterprise Development, January 1987.

54. Lawrence Litvak and Belden Daniels, *Innovations In Development Finance* (Washington, D.C.: Council of State Planning Agencies, 1979); Lawrence Litvak and Michael Barker, *Pension Funds And Economic Development* (Washington, D.C.: The Gallatin Institute, 1983); Council for Community Development, Inc., *Indiana's Financial Markets And Economic Development: A Fresh Approach* (Cambridge, MA: Council for Community Development, January 1984) and *Maine Small Business Finance* (Cambridge, MA: Council for Community Development, Inc., January 1983); The Corporation for Enterprise Development, *Capital Markets In South Carolina: New Directions for Private and Public Actors* (Washington, D.C.: The Corporation for Enterprise, February 1985); and Peter Kwass and Beth Siegel, *Profile of Michigan's Commercial Banking Industry: Implications for Small Business Capital Availability* (Washington, D.C.: The Corporation for Enterprise Development, January 1986).

55. See James Botkin, Dan Dimancesh, and Ray Stata, *Global Stakes: The Future Of High Technology In America* (Cambridge, MA: Ballinger Publishing Company, 1982); James Hickman and John Strong, "The Evolution of New England Industry," *New England Economic Review*, March/April 1986; U.S. Congress, Joint Economic Committee, "Location Of High Technology Firms and Regional Economic Development," 1 June 1982; and U.S. Congress, Office of Technology Assessment, *Technology, Innovation, and Regional Development* (Washington, D.C.: Government Printing Office, July 1984)

56. Several states currently award competitive grants, in some cases to be matched by funds from industry, universities, non-profit organizations, or the federal government, to sponsor the research of private businesses and corporations which, in part because they are small, could not have conducted such research on their own. Pennsylvania's Ben Franklin Partnership Program targets such grants to speed the development and transfer of research results into new industry. Ohio's Thomas Alva Edison Partnership Program provides "challenge grants" for university research likely to result in new businesses, and recoups its investments, in some cases, from royalties paid on the sale of the products of that research. As with technology centers, these R&D financing programs are designed, in part, to demonstrate the state's commitment to new business development and, as such, are a key indicator of its "attractiveness" to new business.

57. While many studies of infrastructure have been published in the past five years, the most recent, and in many ways most illuminating, is Randall Eberts's "Estimating the Contribution of Urban Infrastructure to Regional Growth," Working paper 8610 for the Federal Reserve Bank of Cleveland, December 1986.

58. The only research done to date on state capital budgeting, conducted by the General Accounting Office and the Office of Management and Budget, uses very liberal definitions of "capital budgeting" but, at least at this time, are the only data currently available.

59. States are also experimenting, however, with uses of unemployment compensation, medicaid and other programs to encourage and support training, self-employment and job-creation.

60. We do not measure "coercive" work programs, in which recipients are required to "work off" their benefits, because most reliable data suggest that voluntary programs are cheaper, more effective, and better address the true barriers to self-sufficiency. See the upcoming Robert E. Friedman, *The Safety Net As Ladder: Transfer Payments and Economic Development* (Washington, D.C.: Council of State Policy and Planning Agencies, projected publication in 1987).

61. Employee ownership is not just an option for avoiding a plant shutdown. Retiring owners with no heir but a viable business and entrepreneurs interested in boosting efficiency and employee involvement are converting their firms as well. In fact there are over 8,000 worker-owned enterprises in the U.S. employing ten million workers; only a fraction have resulted from worker buyouts after or as a response to threatened plant closings.

62. In fact, individuals served by the Industrial Adjustment Service are unemployed one-quarter as long as the non-assisted jobless.

Chapter Six: What It All Means

Understanding the results of the first *Development Report Card* depends upon understanding what it was created for in the first place. This is a tool *for* states and *for* the people and businesses within states. It is designed to help them better understand how their economies are performing and why, and sets benchmarks for measuring progress.

It is premised on the increasing evidence that the enduring sources of wealth come from within an economy -- that the capacity to adapt to and take advantage of change resides in the talents, dispositions and institutions of people within the state. What we seek to measure -- and emphasize -- is the degree to which a state cultivates its own garden and invests in its own people, businesses, and infrastructure. Where traditional business climate definitions emphasize the zero-sum game of interstate bidding wars, the *Development Report Card* emphasizes a positive- sum process in which the development of one state increases the prospects of others by expanding markets, increasing the pool of innovators and inventions, creating new entrepreneurial role models, and establishing new opportunities for in-state investment.

It is our hope that the *Development Report Card* will "concentrate the mind" and focus debate on those dynamics, investments and policies that matter, and end pressures from some to focus on those do not.

Of course any index which compares and ranks states invites invidious comparisons. Were we smarter, we might have been able to construct a set of absolute scales by which states could measure their progress. As it is, we compare relative performance -- we grade on the curve. This gives a somewhat distorted picture of the accomplishments of states which do poorly relative to other states, but which by comparison to the rest of the world or on any absolute scale might do reasonably well. Similarly, the grading probably overly rewards states which rank high, but could still achieve more.

Still, there is method to this madness: by comparing relative state performance, we use an American standard. And the fact that performance among the states varies means that progress is possible and that, at least to some extent, states do indeed have some control over their own destinies.

A Tale of Four States

The nation's fifty states present fifty unique economies, each with its own character and performance, each with its own strengths and weaknesses. In addition, differing political, social, and institutional conditions -- largely unmeasured by the *Development Report Card* -- define the priorities for expanding economic opportunity in each of the states.

Varied as these conditions may be, the *Development Report Card* can be an important tool not simply for measuring current economic conditions, but also -- over time -- for measuring progress toward distinctly different state economic goals. The recent experiences of four quite different states illustrate this capability.

South Carolina

South Carolina -- like so many of its southern neighbors -- is a monument to the crippling long-term economic effects of following the traditional "business climate" prescription for economic health. For 20 years the state operated a concentrated, well-organized, and effective program to lure branch plants of northern and midwestern firms to the state with a low wage. low skill, low cost business climate. Taxes and public investments in education, environmental protection, and infrastructure were kept minimal, and unionization was avoided like the plague. And, to an extent, the program had some short-term success: between 1930 and 1974, per capita income rose from 40 percent of the national average to 80 percent.

But by the early 1970s it became clear that South Carolina was no longer competing with northern states for business -- it was competing with Taiwan and Brazil. And losing. State officials learned that companies footloose enough to move into the state for low wages and other business costs moved out just as quickly when cheaper alternatives developed, or simply went out of business altogether in the face of insuperable international competition. In the first five years of this decade alone, South Carolina lost more than 28,000 manufacturing jobs.

Not surprisingly, South Carolina ranks relatively poorly in the *Development Report Card* economic performance, business vitality, and capacity indexes. Real income levels are low, unemployment and inequality are high. And years of inadequate investment have left a legacy of low education levels, underdeveloped infrastructure, and inadequate financial capital to support new, young, and growing firms. A poor state, it made itself poorer by investing 97 percent of its public pension funds, for example, out-of-state.

But all that is changing, and the evidence that it is changing is the state's rising showing in the Policy Index. In 1985, the state began increasing investments in early childhood education as part of a long-term program to strengthen the "educational and economic preparedness" of its population, even though sales taxes had to be raised to pay for it. The State Development Board, one of the foremost "smokestack chasers" in the nation, added a second track to its development strategy emphasizing the cultivation of small businesses and entrepreneurs already within the state. It has established a network of small business incubators, created seed capital funds, conducted a comprehensive study of the state's capital markets and the extent to which they were meeting the needs of in-state businesses, and reassessed and redirected job training and vocational education programs. Finally, a multi-agency development coordinating council was created to oversee the development and application of new policy and, in the process, strengthen the governance system.

By tracking their progress in the Performance, Vitality, and Capacity Indexes of the *Development Report Card*, South Carolina and many of the other southern states can monitor the impact of the new development policies many of them have begun to establish. They can use the indexes to identify weak points and opportunities and mobilize public and policy support for new initiatives -- both public and private -- to address these challenges. In addition, they can use the indexes to keep track of development initiatives in other states -- in education, capital market expansion, governance structures, and the like.

Michigan

Michigan's report card, like many Great Lakes states,bears the unmistakable imprint of a mature, well-developed industrial economy struggling to meet the challenge of a global restructuring of the industries which form its economic base. On one hand, its respectable Performance Index showing for income, job quality, and quality of life indicates a state that is succeeding in its battle for competitive position. On the other hand, lower scores on some employment and equity measures suggest a state experiencing both the long term effects of wholesale plant closings earlier in this decade and associated job losses for some formerly well-paid workers, and continuing difficulty for those who may always have been on the margins of the economy.

Michigan's economic future will depend, in part, on how well it capitalizes on its not-insignificant competitive advantages (a diversified and well-developed manufacturing economy, and a history of investment in infrastructure and the welfare of its residents) and how effectively it remedies its liabilities (a poor record of in-state investment by financial institutions, for example).

The Policy Index makes it clear that Michigan has taken among the most aggressive steps of any state to set the stage for renewed prosperity: new governance mechanisms to speed the development, adoption, and implementation of a comprehensive economic development strategy; creation of a variety of seed, expansion, and venture capital funds through the Michigan Strategic Fund, new pension fund investment policies, and new partnerships with conventional financial institutions; heavy investments in public education at all levels; creation of new applied technology centers to capitalize on those investments; a restructuring of job training programs; a variety of experiments to provide both workers and communities hard hit by plant closings and those who have never been in the economic mainstream with new employment opportunities; and a tax system capable of supporting these investments.

Having made this extraordinary commitment to economic revitalization, Michigan will want to watch closely its progress in both the Performance and Business Vitality Indexes.

Massachusetts

Massachusetts is the valedictorian, performing consistently at or near the top of every index in the *Development Report Card* (with many of its northeastern neighbors not far behind).

It was not always thus. Only a decade or so ago, all signs indicated a state in serious, long-term economic decline, its industries departing for points south and leaving vacant cities that had been the heart of the American industrial revolution. Unemployment and poverty levels were high and new business startups and self-employment rates low. At the same time, much like Michigan today, Massachusetts had significant investments in place -- an excellent education system, well- developed public infrastructure, and wealthy, if not aggressive, financial institutions -- which, though not widely recognized at the time, offered the state important competitive advantages.

What turned things around for Massachusetts was the simultaneous refocusing of private energies on the development of new products, services, production processes, and markets -- many of them technology-based and drawing on the talents of the products of the states's educational system -- and the establishment of a variety of public policies to support these private initiatives. Between 1975 and 1985, Massachusetts pioneered many of the policies that are now encompassed in our Policy Index -- mobilizing capital through the creation of a number of new financial institutions; targeted investment in declining communities; education and training programs to bring the unemployed or marginally employed into the mainstream workforce; and many others.

But the message of the *Development Report Card* for Massachusetts is not simply that congratulations are in order, though it has clearly done an extraordinary job of creating an environment in which businesses can thrive. The message is *also* that a close look at some of the indicators suggests that more needs to be done to include communities and individuals who are not currently equal beneficiaries of the state's boom. Can women and minority incorporation and self-employment rates and income levels be increased to approach those of white males? What actions can be taken to improve the quality of the jobs being created by the boom? How can economic and social policies be connected to expand the opportunities for all the state's residents to be productive?

The message that Massachusetts represents for other states, and which is inherent in the state's ranks in the Indexes, is that the foundations for economic revitalization are very broad indeed, and include sharp improvements in all four measures: Performance, Vitality, Capacity, and Policies.

Texas

If Massachusetts is the boom state of the 1980s, certainly Texas was the boom state of the 1970s, the pulsing heart of the Sunbelt.

But there are critical differences between the two phenomena, and important lessons to be learned from them.

To many observers, the Texas boom was in large part the result of its "good business climate" -- low taxes, limited government regulation, and right-to-work laws, among others. But the bursting of that bubble in the 1980s made it clear that this view was flawed, both as an explanation of past performance and as a prescription for future prosperity.

It is clear now that what was driving the Texas economy was rapidly rising commodity prices -- particularly energy and agricultural commodities -- interregional migration, and an important entrepreneurial boom in the Dallas-Fort Worth area.

The collapse of the energy industry is not fully represented in the results in this *Report Card*, nor is the depressed agriculture sector. Texas's respectable showing in the Performance Index, therefore, is already somewhat dated. An inadequate tax base and budget deficit trouble do not position the state well to respond to the current challenge. Taking a cue from those that have gone before, aggressive capacity-building is clearly a part of the prescription for the state's future.

Next Year

By next year, the states will have moved along with the economic conditions to which they must respond. And so will this index. We will hope to record their progress, not simply by keeping track but also by improving on many of the measures here and by adding measures that currently are missing.

In short, we hope to provide states, and the people and businesses who live in them, with a clearer picture of how they are doing -- even as we learn from their experiments. In this way, we hope to make progress together.

Appendix A: Data Tables and Sources

Performance Index Data: Tables and Sources

Subindex One: Employment

- *Employment Growth*
  Employment of workers on non-agricultural Payrolls, 1980-1985. Percent Change.
  Source: *Employment and Earnings,* Bureau of Labor Statistics, May 1983 and May 1986.

- *Unemployment Rate*
  Percent Unemployed, 1985.
  Source: Employment and Earnings, Bureau of Labor Statistics, May 1986.

- *Duration of Unemployment*
  Percent of unemployed that are unemployed more than 27 weeks. 1985 Annual Rates.
  Source: U.S. Department of Commerce, Geographic Profile of Employment and Unemployment, Bulletin 2266, September 1986.

- *Status of Displaced Workers*
  Percent of employees displaced in January 1981, re-employed in 1986.
  Source: Bureau of Labor Statistics, Division of Labor Force Statistics, press release October 14, 1986.

Subindex Two: Income

- *Earned Income Per Capita*
  Earned Income Per Capita, 1985, by Place of Residence (in dollars). Earned Income equals earned income corrected for residence plus transfer payments.
  Source: Survey of Current Business, August 1986. Calculations by The Corporation for Enterprise Development.
- *Income Change Per Capita*
  Personal Per Capita Income Change 1980-1985. Corrected for Inflation (using the GNP consumption deflator).
  Source: 1980: *State and Metropolitan Area Data Book*, 1986, Bureau of the Census. For 1985: Bureau of Economic Analysis, U.S. Department of Commerce, News Release, September 9, 1986.

- *Percent Below the Poverty Line*
  Percent of Persons Living in Units with Cash Incomes Below the Poverty Line, by State, 1983.

  Source: *Poverty Rates by State, 1978-1983: Estimates from Annual Current Population Surveys.* Christine Roth, U.S. Congressional Budget Office and Sheldon Danziger, Institute for Research on Poverty, University of Wisconsin, Madison, August 1986.

Subindex Three: Job Quality

- *Number of Working Poor*
  Subpoverty level families as a percent of all households who worked in 1979.
  Source: Computed by the Southern Regional Council from the U.S. Census of Population, 1980. U.S. Summary, Table 245.

- *Hourly Earnings*
  Average Hourly Earnings of Production Workers on Manufacturing Payrolls (in dollars per hour). 1985 Averages.
  Source: *Employment and Earnings*, Bureau of Labor Statistics, May 1986.

- *Job-Related Deaths*
  Mining and Construction Industries. Number of deaths per 1,000 workers, 1945-1983.
  Source: Bureau of Labor Statistics, U.S. Department of Commerce; U.S. Statistical Abstract, 1985. Table 712, p. 425.

- *Health Coverage*
  Percent of Civilian Workforce Covered by Primary Health Plan, by State, 1983.
  Source: Employee Benefit Research Institute. *Employee Benefit Notes*, September/October, 1984.

Subindex Four: Equity

- *Distribution of Income*
  Income Distribution: Gini Coefficients for the States, 1983.
  Source: Social Welfare Research Institute, Boston College, "The Micro Economic Impacts of Macro Economic Fiscal Policy, 1981-1985," November 11, 1985.

- *Black Income as a Percentage of White Income*
  Median income (current dollars) of unrelated individuals 15 years and over.
  Source: 1980 Census, Table 61: Selected Social and Economic Characteristics by Race, from individual state volumes: General Social and Economic Characteristics. Calculations by The Corporation for Enterprise Development.

- *AFDC Benefits as a Percentage of Per Capita Income*
  Maximum AFDC Benefits as a Percent of Per Capita Personal Income, Family of Four, January 1986 (Percent).
  Source: Congressional Research Service of the Library of Congress, from survey records of the U.S.Department of Health and Human Services; Per Capita Income, 1984, comes from the Bureau of Economic Analysis of the U.S. Department of Commerce. From *State Policy Data Book*, State Policy Research, Inc., Table G-5, 1986.

- *Life Expectancy*
  Average Life Expectancy In Years for Births in 1979-1981.
  Source: National Center for Health Statistics, *U.S. Decennial Tables for 1979-1981.*

- *Infant Mortality*
  Infant Mortality Rates, 1984. Deaths per 1000 live births.
  Source: Dana Hughes, et al., *The Health of America's Children: Maternal and Child Health Data Book* (Washington, DC: Children's Defense Fund, 1987). Table 3.9, page 201.

- *Crime Index*
  The Crime Rate per 100,000 Residents. Total offenses per 100,000 population, 1985.
  Source: *Annual Crime Report*, Federal Bureau of Investigation, 1986.

All per capita population calculations were made by The Corporation for Enterprise Development.
Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Performance Data

	Employment								Income					
	Employment Growth		Rate of Unemployment		Duration of Unemployment		Displaced Worker Status		Earned Income per Capita		Income Change per Capita		Percent Below Poverty Level	
	%	Rank	%	Rank	%	Rank	%	Rank	$/Ann	Rank	%	Rank	%	Rank
Alabama	4.7	29	8.9	42	14.9	32	67	26	9,311	40	11.7	25	22.9	48
Alaska	36.7	1	9.7	46	7.1	2	57	44	16,520	1	8.3	33	12.5	13
Arizona	27.3	2	6.5	22	7.4	4	74	13	10,508	28	13.0	21	16.6	33
Arkansas	7.4	23	8.7	39	11.1	18	65	34	8,869	47	16.1	16	21.6	45
California	11.5	13	7.2	29	11.6	19	71	20	13,331	6	14.3	19	14.9	22
Colorado	13.7	8	5.9	16	8.2	6	66	30	12,404	9	14.5	18	12.6	14
Connecticut	10.1	19	4.9	5	9.6	13	66	30	14,716	2	25.0	5	9	5
Delaware	13.6	9	5.3	9	9.6	13	75	12	11,979	13	11.9	23	8.5	3
Florida	23.8	3	6.0	19	8.3	7	71	20	10,441	29	17.1	15	14.9	22
Georgia	19.5	5	6.5	22	7.9	5	74	13	10,827	25	24.5	6	18.8	42
Hawaii	4.7	29	5.6	13	11.7	20	50	50	11,762	14	4.9	42	13.4	16
Idaho	1.8	37	7.9	32	9.4	12	56	46	9,226	43	5.8	38	17.3	39
Illinois	-2.6	49	9.0	44	20.8	45	64	36	12,091	12	9.6	29	14.3	20
Indiana	1.8	37	7.9	32	17.3	40	76	11	10,424	30	7.2	37	16.1	32
Iowa	-2.5	48	8.0	34	24.3	49	64	36	9,974	34	5.2	40	16.6	33
Kansas	2.7	35	5.0	7	12.0	21	72	18	11,261	20	9.1	31	13.5	17
Kentucky	3.1	33	9.5	45	20.3	44	64	36	9,188	44	10.1	28	18.0	40
Louisiana	1.7	39	11.5	49	18.5	41	57	44	9,617	38	2.6	46	21.7	46
Maine	9.5	20	5.4	10	13.0	26	72	18	9,946	35	21.8	8	12.4	12
Maryland	11.2	16	4.6	3	14.6	31	79	8	13,406	5	21.5	9	8.6	4
Massachusetts	10.5	18	3.9	1	12.5	24	77	9	13,578	4	30.7	2	7.7	1
Michigan	1.5	41	9.9	47	22.3	47	67	26	11,480	18	7.4	35	16.8	36
Minnesota	5.4	28	6.0	19	16.3	34	74	13	11,682	15	14.3	19	12.2	11
Mississippi	-0.1	42	10.3	48	16.8	36	69	22	8,045	50	7.4	35	27.0	50
Missouri	6.4	26	6.4	21	14.0	29	67	26	10,735	26	18.0	12	16.8	36
Montana	-0.9	45	7.7	31	16.4	35	69	22	8,682	49	0.2	48	15.1	25
Nebraska	3.0	34	5.5	12	14.1	30	64	36	10,707	27	17.8	14	15.3	26
Nevada	11.5	13	8.0	34	13.0	26	81	4	12,144	11	2.1	47	9.8	6
New Hampshire	21.0	4	3.9	1	6.2	1	95	1	12,485	8	30.8	1	8.1	2
New Jersey	12.0	12	5.7	15	13.3	28	65	34	14,053	3	27.7	3	11.0	9
New Mexico	12.1	11	8.8	40	17.1	38	74	13	9,308	41	5.8	38	24.2	49
New York	7.6	22	6.5	22	17.1	38	55	47	13,122	7	25.2	4	15.9	30
North Carolina	10.9	17	5.4	10	12.4	22	69	22	10,053	33	17.9	13	15.9	30
North Dakota	2.0	36	5.9	16	9.0	9	64	36	9,524	39	7.8	34	15.0	24
Ohio	-0.5	44	8.9	42	23.8	48	63	41	11,082	22	9.2	30	13.6	18
Oklahoma	3.9	3	7.1	27	12.4	22	81	4	10,221	32	4.0	43	16.9	38
Oregon	-1.2	47	8.8	40	19.2	43	66	30	10,276	31	3.9	44	16.6	33
Pennsylvania	-0.4	43	8.0	34	19.0	42	62	42	11,187	21	12.2	22	15.5	27
Rhode Island	6.5	25	4.9	5	7.3	3	73	17	11,494	17	19.6	11	14.8	21
South Carolina	9.4	21	6.8	25	14.9	32	77	9	9,230	42	11.8	24	21.0	44
South Dakota	4.2	31	5.1	8	10.6	17	67	26	8,949	46	11.3	26	18.1	41
Tennessee	7.2	24	8.0	34	17.0	37	54	48	9,692	37	14.7	17	20.1	43
Texas	14.0	7	7.0	26	9.2	10	66	30	11,446	19	11.3	26	15.7	29
Utah	12.6	10	5.9	16	9.8	15	82	3	9,127	45	5.1	41	13.9	19
Vermont	11.5	13	4.8	4	9.9	16	83	2	9,929	36	20.5	10	15.6	28
Virginia	15.4	6	5.6	13	8.8	8	80	7	12,276	10	22.4	7	11.4	10
Washington	6.2	27	8.1	38	12.5	24	69	22	11,513	16	3.9	44	10.9	8
West Virginia	-7.7	50	13.0	50	31.1	50	53	49	8,754	48	0.1	49	22.3	47
Wisconsin	1.6	40	7.2	29	21.5	46	59	43	10,868	24	9.0	32	10.6	7
Wyoming	-1.0	4	7.1	27	9.3	11	81	4	11,059	23	-11.4	50	12.7	15

Please refer to *Performance Data:* Tables and Sources and the Performance Index for further detail on individual variable measures.

Job Quality								Equity						Quality of Life					
Working Poor		Hourly Earnings		Job Related Death ~~Rates~~		Health Plan Coverage		Distribution of Income		Black Income as % of White		AFDC as % of PC Income		Average Life Expectancy		Infant Mortality per 1,000		Crime Rate per 100,000	
%	Rank	$/Hr	Rank	#	Rank	%	Rank	Gini	Rank	%	Rank	%	Rank	Age	Rank	Deaths	Rank	Rate	Rank
9.4	45	8.50	34	5.6	29	54.82	36	0.389	35	56.6	43	18.0	27	72.5	45	12.9	47	3942.1	15
6.0	25	12.20	2	12.1	45	55.01	34	0.355	12	63.8	37	56.0	5	72.2	46	11.2	38	5877.0	40
6.9	31	9.50	23	8.0	39	56.12	32	0.404	42	69.9	30	36.0	16	74.3	21	9.5	10	7116.2	49
10.0	48	7.60	44	5.0	23	48.33	46	0.424	50	58.7	42	27.0	23	73.7	29	10.9	31	3585.0	8
5.7	21	10.10	12	4.2	15	60.65	19	0.386	33	72.4	28	58.0	4	74.6	19	9.4	9	6518.0	43
5.4	19	9.50	23	9.4	43	52.44	39	0.390	38	80.5	12	36.0	16	75.3	8	10.2	20	6919.1	48
3.2	1	9.60	20	3.5	7	63.11	8	0.350	7	79.5	13	48.0	9	75.1	11	10.4	23	4704.8	26
6.1	26	9.80	17	5.9	33	66.02	2	0.376	26	72.5	27	31.0	19	73.2	40	10.8	29	4961.3	30
7.1	33	7.90	43	7.0	38	51.84	40	0.403	41	55.7	45	28.0	22	74.0	22	10.8	29	7574.2	50
8.6	43	8.00	42	5.0	23	59.64	23	0.421	48	56.4	44	27.0	23	72.2	46	12.9	47	5110.1	32
4.7	13	8.60	33	4.5	18	62.43	12	0.350	7	81.9	11	50.0	8	77.0	1	9.9	14	5200.6	33
7.9	38	9.40	27	5.5	28	58.93	26	0.379	31	82.8	8	41.0	12	75.2	10	9.8	13	3908.1	13
4.5	10	10.40	7	4.0	11	65.77	3	0.354	9	65.3	34	33.0	17	73.4	36	12.1	43	5299.7	34
5.2	18	10.70	5	4.2	15	61.39	14	0.344	3	82.7	9	32.0	18	73.8	26	11.1	36	3914.1	14
5.8	23	10.30	9	3.6	8	49.67	43	0.377	28	72.1	29	44.0	11	75.8	3	8.8	4	3942.9	16
5.4	19	9.50	23	6.1	34	54.98	35	0.363	18	76.3	20	41.0	12	75.3	8	10.1	19	4375.1	24
9.4	45	9.50	23	8.9	42	59.96	22	0.367	20	66.7	32	29.0	21	73.1	41	11.5	39	2947.2	4
9.0	44	10.40	7	13.8	48	56.71	31	0.422	49	47.7	49	26.0	24	71.7	50	12.1	43	5563.6	38
7.1	33	8.40	36	4.0	11	56.85	30	0.362	17	96.0	1	54.0	7	74.6	19	8.4	2	3671.7	9
4.3	5	9.70	18	5.2	26	62.09	13	0.378	30	76.8	17	33.0	17	73.3	38	11.8	41	5372.8	36
3.3	2	9.00	31	3.0	3	62.95	10	0.369	22	86.1	5	41.0	12	75.0	13	9.0	7	4754.8	28
4.4	7	12.60	1	3.2	5	60.99	16	0.359	15	78.2	14	55.0	6	73.7	29	11.7	40	6366.3	41
5.1	16	10.00	13	4.1	14	51.17	41	0.354	9	85.3	6	56.0	5	76.2	2	8.9	6	4134.2	20
12.7	50	7.20	49	6.7	36	57.10	29	0.408	43	55.5	46	20.0	26	72.0	48	14.4	49	3265.7	7
6.3	28	9.60	20	4.3	17	56.12	32	0.389	35	77.9	16	32.0	18	73.8	26	10.4	23	4366.0	23
7.4	36	11.00	4	8.1	40	37.63	50	0.389	35	93.0	4	48.0	9	73.9	25	8.8	4	4549.3	25
6.3	28	9.00	31	3.8	10	49.19	44	0.356	13	76.4	19	41.0	12	75.5	6	9.6	11	3694.6	10
4.7	13	9.10	30	6.8	37	66.35	1	0.369	22	84.5	7	31.0	19	72.6	44	10.5	27	6574.6	46
4.4	7	8.40	36	5.8	31	59.11	25	0.342	2	64.1	36	40.0	13	75.0	13	10.2	20	3251.9	6
3.8	4	9.90	14	3.6	8	64.34	6	0.357	14	75.6	22	36.0	16	74.0	22	10.9	31	5094.4	31
9.4	45	8.40	36	12.4	46	51.14	42	0.414	45	76.8	17	37.0	15	74.0	22	9.6	11	6486.2	42
3.5	3	9.70	18	3.0	3	65.55	4	0.376	26	76.2	21	59.0	3	73.7	29	11.0	33	5588.5	39
7.7	37	7.30	48	4.7	20	63.04	9	0.409	44	63.7	38	30.0	20	73.0	42	12.4	46	4121.4	19
8.1	40	8.10	41	6.3	35	41.16	49	0.393	39	94.3	3	44.0	11	75.7	5	8.1	1	2679.4	3
4.8	15	11.40	3	4.0	11	64.11	7	0.367	20	69.4	31	36.0	16	73.5	35	10.4	23	4187.3	22
7.0	32	9.90	14	13.4	47	48.10	47	0.401	40	65.5	33	40.0	13	73.7	29	11.0	33	5425.0	37
5.7	21	10.50	6	3.3	6	59.26	24	0.377	28	74.4	25	50.0	8	75.0	13	9.9	14	6729.8	47
4.3	5	9.60	20	4.7	20	64.53	5	0.354	9	73.7	26	45.0	10	73.6	33	10.4	23	3037.4	5
4.6	11	7.60	44	2.9	1	59.99	21	0.382	32	74.7	23	54.0	7	74.8	17	9.9	14	4723.5	27
8.4	42	7.60	44	5.7	30	58.73	27	0.359	15	54.5	48	28.0	22	71.8	49	14.7	50	4840.5	29
10.8	49	7.40	47	4.5	18	45.94	48	0.365	19	82.5	10	40.0	13	75.0	13	10.0	18	2640.8	2
8.2	41	8.30	40	4.8	22	62.67	11	0.416	46	63.2	39	21.0	25	73.3	38	11.8	41	4166.7	21
7.9	38	9.40	27	11.7	44	57.51	28	0.416	46	62.3	41	21.0	25	73.6	33	10.5	27	6568.7	45
6.1	26	9.40	27	8.1	40	53.64	37	0.349	6	41.0	50	54.0	7	75.8	3	9.1	8	5317.3	35
6.8	30	8.40	36	5.2	26	56.85	30	0.348	4	55.1	47	72.0	1	74.8	17	8.7	3	3888.0	12
5.8	23	8.50	34	5.8	31	61.25	15	0.386	33	62.6	40	37.0	15	73.4	36	12.1	43	3779.1	11
5.1	16	NA	3	5.0	23	52.84	38	0.348	4	78.0	15	54.0	7	75.1	11	10.2	20	6528.8	44
7.2	35	10.20	11	14.6	49	60.93	17	0.370	24	74.7	23	38.0	14	72.8	43	11.0	33	2252.8	1
4.4	7	10.30	9	2.9	1	60.76	18	0.340	1	95.5	2	62.0	2	75.4	7	9.9	14	4016.7	18
4.6	11	9.90	14	25.6	50	48.69	45	0.373	25	65.0	35	38.0	14	73.8	26	11.1	36	4015.1	17

Business Vitality Index Data: Tables and Sources

Subindex One: Competitiveness of Existing Businesses

- *International Exports*
  Export Related Manufactures as a Percent of State Manufacturing Production, 1983.
  Source: International Trade Administration, "Business America," April 28, 1986.

- *Manufacturing Investment Per Production Worker*
  New Capital Expenditure per Production Worker, 1984 (in Thousands of Dollars).
  Source: Census Bureau, *Annual Survey of Manufacturers*, 1984. Table 1: Historical Statistics for the United States and States: 1984 and Earlier Years.

- *Percent of High Growth Companies*
  Percent of businesses in state which have a growth index of 20 or over between beginning of 1982 and beginning of 1986. Index number derived by multiplying percent of job growth by absolute job growth.
  Source: *Inc.*, October 1986. Developed by Cognetics, Cambridge, Massachusetts.

- *Presence of Fortune 1000 Corporation Headquarters*
  Presence of Fortune 1000 Firms, by State, 1985. Fortune 1000 headquarters per million residents.
  Source: *Fortune*, April 28, 1986 and June 9, 1986. Calculations by The Corporation for Enterprise Development.

Subindex Two: Entrepreneurial Energy

- *Business Formation Rates*
  Percent of all business establishments in state founded after 1981 with 10 or more employees by January 1986.
  Source: *Inc.*, October 1986. Developed by Cognetics, Cambridge, Massachusetts.

- *Self-Employment Rates*
  Non-Agriculturally Self-Employed Persons as a Percent of the Labor Force, 1980.
  Source: 1980 Census. Table 240, General Social and Economic Characteristics, U.S. Summary, Bureau of the Census. Calculations by The Corporation for Enterprise Development.

- **Minority And Women Business Ownership**
- *Women's Business Ownership*
  Percent of the Female Labor Force Owning Businesses, 1982.
  Source: 1982 Economic Census, Women Owned Businesses, U.S. Department of Commerce, Bureau of the Census. *State and Metropolitan Area Data Book*, 1986. Calculations by The Corporation for Enterprise Development.

- *Minority Business Ownership*
  Percent of the Minority Labor Force Owning Businesses, 1982.
  Source: *1982 Survey of Minority Owned Business Enterprises*. Volumes entitled: *Hispanic*; *Black*; and *Asian American, American Indians, and Other Minorities*. State and Metropolitan Area Data Book 1986. Calculations by The Corporation for Enterprise Development.

All per capita population calculations were made by The Corporation for Enterprise Development. Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Business Vitality Data

	Competitiveness of Existing Business							
	Int'l Exports		Mfg Investment		Growth Companies		Corp Headquarters	
	percent	rank	$ in 000s	rank	percent	rank	hdqtrs/million	rank
Alabama	11.00	19	4.9	37	1.83	36	0.99	39
Alaska	25.40	1	12.9	3	3.23	5	1.92	34
Arizona	14.50	6	9.0	5	3.29	3	2.82	25
Arkansas	11.60	17	3.9	48	1.60	41	2.97	22
California	11.90	11	7.1	12	2.83	9	4.02	13
Colorado	10.90	22	8.0	9	2.51	15	2.48	29
Connecticut	15.00	4	5.1	33	2.69	12	16.70	1
Delaware	11.70	14	8.6	7	3.35	2	12.86	2
Florida	11.70	14	6.0	23	2.43	19	2.02	33
Georgia	8.30	43	5.3	30	2.77	10	3.35	19
Hawaii	7.70	45	4.4	43	1.88	34	3.80	16
Idaho	10.40	28	7.0	13	1.40	46	2.99	21
Illinois	10.10	31	5.0	35	2.12	28	7.80	4
Indiana	11.80	12	6.1	20	2.15	27	2.91	24
Iowa	9.00	42	4.8	38	1.30	48	2.08	31
Kansas	7.40	46	7.7	10	1.99	30	1.63	36
Kentucky	9.60	35	6.4	18	1.63	40	1.61	37
Louisiana	11.30	18	14.9	1	2.11	29	0.89	41
Maine	9.30	37	6.1	20	2.27	24	0.86	42
Maryland	9.30	37	7.0	13	3.11	6	2.73	26
Massachusetts	13.30	7	5.4	28	3.41	1	5.15	10
Michigan	13.30	7	6.6	17	2.19	25	3.85	15
Minnesota	10.30	30	7.2	11	1.99	30	7.39	5
Mississippi	9.40	36	3.9	48	1.48	43	0.00	49
Missouri	10.10	31	5.6	24	1.83	36	5.37	8
Montana	6.80	48	4.6	40	1.18	49	0.00	44
Nebraska	8.20	44	4.1	47	1.49	42	3.74	17
Nevada	9.90	33	4.2	46	1.97	32	0.00	45
New Hampshire	10.60	25	4.4	43	3.29	3	3.01	20
New Jersey	9.30	37	5.3	30	2.48	17	5.55	7
New Mexico	6.40	49	13.8	2	2.51	15	0.00	47
New York	10.40	28	5.5	25	2.44	18	8.77	3
North Carolina	10.60	25	5.0	35	2.36	21	2.08	32
North Dakota	9.10	41	6.4	18	1.16	50	0.00	48
Ohio	12.10	10	5.4	28	2.17	26	5.58	6
Oklahoma	10.80	23	5.2	32	1.82	38	2.12	30
Oregon	12.20	9	4.5	42	1.69	39	2.61	27
Pennsylvania	10.50	27	4.7	39	2.28	23	4.47	11
Rhode Island	10.70	24	2.8	50	2.85	8	5.17	9
South Carolina	11.70	14	6.1	20	2.33	22	0.90	40
South Dakota	7.10	47	4.4	43	1.32	47	0.00	46
Tennessee	11.00	19	4.6	40	2.40	20	2.52	28
Texas	11.80	12	9.1	4	3.07	7	3.91	14
Utah	9.70	34	6.7	16	2.75	11	1.22	38
Vermont	14.80	5	8.7	6	2.66	13	1.87	35
Virginia	11.00	19	5.1	33	2.60	14	4.38	12
Washington	24.10	2	8.4	8	1.86	35	2.95	23
West Virginia	16.10	3	6.8	15	1.45	44	0.52	43
Wisconsin	9.30	37	5.5	25	1.93	33	3.56	18
Wyoming	5.20	50	5.5	25	1.41	45	0.00	50

Please refer to *Business Vitality:* Tables and Sources and the Business Vitality Index for further detail on individual variable measure

Entrepreneurial Energy

Business Formation		Self Employed		Women's Business		Minority Business	
percent	rank	percent	rank	percent	rank	percent	rank
2.19	18	7.17	35	5.5	47	2.5	50
2.92	6	9.04	10	14.1	1	15.5	8
4.07	1	8.00	22	8.8	22	18.9	4
1.74	40	9.25	8	7.4	27	3.4	44
2.70	8	8.98	11	9.6	17	13.6	10
3.05	3	9.25	8	13.1	2	17.9	5
1.90	31	7.30	31	7.4	27	4.9	30
2.11	21	5.96	48	6.2	43	3.4	44
3.04	4	9.58	5	8.0	24	7.8	16
2.94	5	7.16	36	5.8	44	3.2	46
1.93	28	7.50	30	9.8	15	10.5	12
1.77	38	10.12	4	10.9	8	25.0	2
1.76	39	6.51	42	6.6	39	4.4	32
2.08	22	6.63	41	7.9	25	4.2	35
1.19	50	8.18	21	9.4	19	7.8	16
1.98	26	8.57	15	10.9	8	8.7	13
2.05	25	7.67	27	7.2	30	4.2	35
2.41	14	7.64	28	7.0	36	3.9	41
1.41	47	9.34	7	9.5	18	7.3	18
2.69	9	6.28	45	7.2	30	5.4	26
2.07	23	6.74	39	7.2	30	5.9	22
1.93	28	6.28	45	7.1	34	4.0	39
1.83	35	7.70	26	9.4	19	6.3	19
1.87	33	7.88	23	5.5	47	2.8	47
1.86	34	7.71	25	7.6	26	4.2	35
1.46	46	10.56	1	12.6	3	4.3	34
1.51	44	8.35	18	10.3	14	41.3	1
2.73	7	7.26	33	7.4	27	5.9	22
2.18	19	8.39	17	8.1	23	8.1	15
2.15	20	7.28	32	5.6	46	5.1	29
2.29	16	8.74	13	9.7	16	20.9	3
1.97	27	7.62	29	7.1	34	5.3	27
2.33	15	1.74	50	5.8	44	3.5	43
1.38	48	7.77	24	11.0	7	5.3	27
1.89	32	6.10	47	6.9	37	4.0	39
2.24	17	9.51	6	10.9	8	5.9	22
1.80	36	10.36	3	11.1	6	6.3	19
1.71	41	6.67	40	6.5	41	3.9	41
1.56	43	6.96	37	5.3	49	5.8	25
2.56	11	2.09	49	5.1	50	2.7	48
1.23	49	8.90	12	10.7	11	4.2	35
2.44	13	7.18	34	6.4	42	2.7	48
3.88	2	8.19	20	8.9	21	14.0	9
2.50	12	8.24	19	12.0	4	15.7	7
1.50	45	10.41	2	10.7	11	10.6	11
2.67	10	6.34	44	6.6	39	4.4	32
2.06	24	8.73	14	10.4	13	8.7	13
1.93	28	6.42	43	7.2	30	6.3	19
1.68	42	6.95	38	6.7	38	4.7	31
1.80	36	8.57	15	12.0	4	17.1	6

Capacity Index Data: Tables and Sources

Subindex One: Human Resource Capacity

- **Labor Force Skills and Educational Quality**
- *College Education Attainment*
  Percent of Population over 25 with at least 4 years of College. 1980.
  Source: National Center for Education Statistics, "Digest of Education Statistics. 1986-1986."

- *High School Graduation Rate*
  Percent of High School Entrants Graduating. Adjusted for migration and unclassified students. 1985.
  Source: U.S. Department of Education, Office of Planning, Budget and Evaluation, "Wall Chart," February 1987.

- *Public Expenditures Per Pupil*
  Expenditures per Pupil, 1984-1985 (in dollars).
  Source: American Federation of Teachers, Department of Research, April 1986.

- *Pupil/Teacher Ratios in Primary and Secondary Schools*
  Pupils per Teacher, 1984-1985.
  Source: American Federation of Teachers, Department of Research, April 1986.

- *Net Migration of College Students*
  Net Migration of College Students, Fall 1981 (in thousands).
  Source: National Center for Education Statistics, U.S. Department of Education. "Digest of Education Statistics. 1986-1986."

- **Technological Innovation and the Pool of Innovators**
- *Scientists and Engineers as a Percent of the Workforce*
  Scientists and Engineers per 100,000 Population, 1982.
  Source: "Scientists and Engineering Doctorates," Division of Science Resource Studies, National Science Foundation, 1985.

- *Number of Doctoral Degrees in Physical Sciences and Engineering*
  New Science and Engineering Doctorates by State, 1985 (number per 100,000 population).
  Source: "Characteristics of Doctorates in Science and Engineering in the United States" Division of Science Resource Studies, National Science Foundation.

- *Patents Issued Per 1,000 Residents*
  Patents Issued Per 1,000 Residents.
  Source: "Technology Assessment and Forecast Report: Patent Counts by Country/State and Year, 1/1963 - 12/1985," report prepared by the Office of Documentation, U.S. Patent and Trademark Office, March 1986; United States Bureau of the Census, *Current Population Reports*, Series P25, January 1986.

- *University Research and Development Spending*
  Research and Development Expenditures at Doctorate Granting Institutions by State, Per Capita, 1985 (in dollars).
  Source: "Characteristics of Doctorates in Science and Engineering in the United States" Division of Science Resource Studies, National Science Foundation, 1986.

- *Federal Research and Development Spending*
  Federal Obligations for Research and Development, Per Capita, 1985 (in dollars).
  Source: National Science Foundation, 1986, cited in *Wall Street Journal*, November 11, 1986. "Federal Funds for Research and Development," Division of Science Resource Studies, National Science Foundation.

▨ **Entrepreneurial Culture**

- *Entrepreneurial Awareness*
  Index of Media Mentions of Entrepreneurship by State. Articles mentioning entrepreneurship and state as a percentage of all articles on state and all articles on entrepreneurship added.
  Source: TRAC, Inc., Alexandria, Virginia. Computer search of the following databases in the DIALOG Information System. File 15; ABI Inform, File 16; PTS Prompt, File 75; Management Contents, File 148; Trade and Industry, and File 260; UPI wire.

Subindex Two: Financial Resource Capacity

▨ **Capital Resources**

- *Commercial Bank Deposits Per Capita*
  Deposits Per Capita, Commercial Banks, Domestic Actitivities. June 1986 (in dollars).
  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Calculations by The Corporation for Enterprise Development.

- *Dividends, Interest and Rent Income Per Capita*
  Dividends, Rents and Interest Per Capita, 1985 (in dollars).
  Source: *Survey of Current Business*, August 1986. Calculations by The Corporation for Enterprise Development.

- *Venture Capital Headquartered in the State*
  Venture Capital Funds Headquartered in the State, Per Capita, 1985 (in dollars).
  Source: AmeriTrust Corporation and SRI International, "Indicators of Economic Capacity." December 1986.

▨ **Capital Utilization**

- *Loans to Equity*
  Total Loans and Leases as a Percent of Total Equity, Commercial Banks, Domestic Actitivities. Ratio. June 1986.
  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Calculations by The Corporation for Enterprise Development.

- *Commercial and Industrial Loans Per Non-agricultural Employee*
  Commercial and Industrial Loans Per Production Worker on Non-agricultural Payrolls, 1985 (in dollars). Commercial Banks, Domestic Activities. June 1986.
  Source: Division of Research, Federal Deposit Insurance Corporation, unreleased data, 1987. Employment and Earnings, May 1986. Calculations by The Corporation for Enterprise Development.

Subindex Three: Physical Infrastructure Capacity

- *Transportation System Capacity*
  Percent of Rural Non-Interstate Principal Arterials with Pavement Serviceability Ratings Below 2.0. December 1984.
  Source: Federal Highway Administration. *Status of the Nation's Highways; Report to the Congress*, Federal Highway Administration, June 1985.

- *Sewage Treatment Plant Capacity*
  Estimated Backlog of Sewage Treatment Plant Unmet Needs, Per Capita, January 1984 (in dollars).
  Source: U.S. Department of Commerce, Bureau of the Census, and Environmental Protection Agency. Calculations performed by *State Policy Reports*.

- *Airport Capacity*
  Airport Takeoffs and Landings, Per Capita, November 1983.
  Source: State and Metropolitan Area Data Book, 1986. Calculations by The Corporation for Enterprise Development.

Subindex Four: Amenities

- *Doctors Per Capita*
  Physicians, Active, Non Federal, Number Per 100,000 Population, 1982.
  Source: *State and Metropolitan Area Data Book*, Bureau of the Census.
- *State Arts Agency Appropriations*
  State Art Agencies Legislative Appropriations, Fiscal Year 1986, Per Capita (in dollars).
  Source: National Assembly of State Arts Agencies. As published in "Estimates of Philanthropic Giving in 1985 and the Trends They Show," *Giving USA,* 31st Annual Issue, New York: Algonquin Press, 1986. Page 89.
- *Distribution of Foundation Grant Funds*
  State Distribution of Grants Received, Per Capita, 1985 (in dollars).
  Source: *The Foundation Grants Index, 14th Edition.*

All per capita population calculations were made by The Corporation for Enterprise Development.
Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Capacity Data

Human Resource Capacity

	Labor Force Skills and Educational Quality										Technological Innovation and			
	College Graduation		High School Graduation		Expenditures per Pupil		Pupil/Teacher Ratio		College Student Migration		Scientists per 100,000		Doctoral Degrees per 100,000	
	%	Rank	%	Rank	$	Rank		Rank	1,000's	Rank	#	Rank	#	Rank
Alabama	12.6	45	63.0	42	$2241	49	20.2	29	4.6	12	1.04	45	28	44
Alaska	22.4	2	67.1	37	6867	1	16.4	14	-2.0	[illegible]	2.02	15	15	50
Arizona	16.8	19	64.5	36	4074	7	18.3	21	17.0	2	1.45	30	77	21
Arkansas	9.7	50	75.7	20	2344	46	17.9	20	-0.4	36	0.67	50	25	46
California	19.8	6	65.8	38	3291	24	23.3	32	37.0	1	2.10	14	93	13
Colorado	23.0	1	72.2	29	3398	22	19.2	25	3.9	16	2.67	6	103	9
Connecticut	21.2	3	80.4	10	4477	5	13.6	2	-10.0	47	2.36	8	88	14
Delaware	16.3	21	69[illegible]	34	3814	12	16.4	14	0.3	33	6.73	1	109	5
Florida	14.7	34	61.2	47	3409	21	16.6	15	5.6	9	0.85	49	37	40
Georgia	15.3	27	62.6	44	2692	37	19.3	26	3.6	17	1.08	43	55	31
Hawaii	20.3	4	73.8	25	3596	15	19.9	28	-1.1	40	2.13	12	101	10
Idaho	16.1	22	76.7	15	2290	48	20.5	30	1.7	23	1.72	19	35	41
Illinois	14.5	35	74.0	24	3517	16	18.3	21	-15.9	49	1.56	24	95	12
Indiana	12.4	46	76.4	16	2638	40	19.3	26	6.9	8	1.38	35	99	11
Iowa	14.1	38	86.5	3	3096	29	16.2	12	4.0	15	1.38	35	111	4
Kansas	15.7	25	81.4	9	3668	14	15.4	6	3.2	19	1.35	38	107	8
Kentucky	11.0	48	68.2	35	2792	35	19.9	28	1.4	25	0.96	48	32	42
Louisiana	13.4	42	54.7	48	2650	38	19.0	24	4.3	14	1.18	41	28	45
Maine	14.0	39	78.6	11	3038	31	16.6	15	-1.1	40	1.51	27	15	49
Maryland	19.8	6	77.7	12	4101	6	17.7	19	-8.5	46	3.51	3	87	15
Massachusetts	20.0	5	76.3	17	3889	10	15.7	8	14.8	4	3.21	4	183	1
Michigan	15.2	29	71.9	30	3434	20	22.7	31	-3.5	45	1.39	33	79	17
Minnesota	16.7	20	90.6	1	3100	28	17.3	18	-2.3	44	1.63	21	79	17
Mississippi	13.0	44	61.8	46	2300	47	18.6	23	1.1	28	1.07	44	38	39
Missouri	14.0	39	76.1	18	2993	32	16.8	16	7.2	7	1.41	32	60	28
Montana	17.3	15	82.9	8	3968	9	14.6	4	-0.6	38	1.60	23	42	37
Nebraska	16.1	22	86.9	2	3128	27	15.2	5	0.9	29	1.47	29	64	26
Nevada	15.1	31	63.9	40	2590	41	20.2	29	-1.3	42	0.98	47	18	48
New Hampshire	18.4	13	75.2	21	2541	42	15.7	8	1.2	26	1.26	40	47	36
New Jersey	18.6	12	77.3	13	5219	2	15.5	7	-37.7	50	2.37	7	52	34
New Mexico	17.3	15	71.9	30	2467	44	18.4	22	-0.6	38	3.64	2	78	20
New York	18.7	11	62.7	43	4632	4	15.4	6	-11.2	48	2.21	11	108	6
North Carolina	13.4	42	70.3	33	2483	43	19.2	25	9.3	5	1.52	26	73	24
North Dakota	15.2	29	86.1	4	2813	34	16.1	11	0.7	30	1.62	22	53	33
Ohio	14.8	33	76.1	18	3315	23	18.4	22	2.9	20	1.49	28	65	25
Oklahoma	15.7	25	71.1	32	3270	25	16.9	17	2.6	22	1.36	37	55	32
Oregon	17.2	17	72.7	28	3470	18	18.3	21	1.2	26	1.73	18	84	16
Pennsylvania	13.8	41	77.2	14	4002	8	16.8	16	2.7	21	1.71	20	77	22
Rhode Island	15.3	27	71.3	31	3494	17	15.9	9	4.9	10	2.25	10	163	2
South Carolina	14.2	36	62.4	45	2650	39	17.9	20	0.7	30	1.14	42	41	38
South Dakota	14.2	36	85.1	5	2700	36	15.2	5	0.1	34	1.30	39	24	47
Tennessee	11.9	47	64.1	39	2349	45	20.5	30	7.8	6	1.44	31	55	30
Texas	16.0	24	63.2	41	3199	26	16.3	13	16.8	3	1.39	33	56	29
Utah	15.1	31	75.9	19	2150	50	23.7	33	4.8	11	2.32	9	125	3
Vermont	19.5	8	83.4	7	3783	13	14.0	3	1.7	23	2.75	5	49	35
Virginia	19.2	9	73.7	26	3043	30	16.0	10	0.4	32	2.11	13	63	27
Washington	18.8	10	74.9	22	3437	19	19.6	27	-0.2	35	1.96	16	74	23
West Virginia	10.5	49	72.8	27	2866	33	16.0	10	3.4	18	0.99	46	31	43
Wisconsin	17.9	14	84.0	6	3880	11	16.8	16	4.5	13	1.55	25	108	6
Wyoming	17.2	17	74.3	23	4932	3	12.2	1	-0.5	37	1.85	17	79	19

Please refer to *Capacity Data*: Tables and Sources and the CapacityIndex for further detail on individual variable measures.

Financial Resource Capacity

the Pool of Innovators						Entrepreneurial Awareness		Capital Resources									
Patents per 1,000 #	Rank	University R&D per capita $	Rank	Federal R&D per capita $	Rank	Score	Rank	Bank Deposits per capita $	Rank	Dividends per capita $	Rank	Venture Capital per capita $	Rank	Loans to Equity Ratio	Rank	Loans per Worker $	Rank
0.06	39	25.90	37	223	12	0.1	48	5420.3	46	1361	48	0.00	34	2.5	36	3005.5	38
0.05	44	55.21	7	98	25	3.2	1	7621.0	15	1668	39	0.00	34	3.3	24	5023.3	8
0.17	14	42.94	17	143	17	1.3	13	6869.3	24	2286	24	12.10	18	27.0	1	3814.0	21
0.03	48	12.74	49	16	50	0.8	22	6416.1	32	1605	43	0.00	34	2.0	42	3378.1	30
0.20	10	46.70	14	408	6	1.3	13	7412.1	19	2735	6	123.10	3	12.8	5	4361.5	11
0.17	14	51.40	10	195	13	1.5	9	6398.6	32	2492	13	38.30	8	2.8	28	3243.1	31
0.41	2	59.44	5	234	10	2.1	4	7026.8	21	3371	1	103.50	5	10.3	8	3659.8	24
0.45	1	37.95	22	57	30	1.4	11	19829.8	1	2293	22	0.00	34	2.6	34	19856.4	1
0.10	28	17.89	45	105	23	0.8	22	6796.9	26	3300	2	4.40	22	3.6	22	2744.9	43
0.07	37	36.59	24	48	37	0.7	31	6077.6	36	1716	38	4.40	22	4.5	19	3166.2	35
0.03	48	51.26	11	55	34	1.4	11	7964.5	13	2050	32	1.40	32	5.9	11	3213.4	34
0.06	39	20.76	40	258	8	0.8	22	574[illegible].3	41	1893	37	2.00	29	2.9	26	3934.5	16
0.22	7	34.09	27	67	28	0.8	22	8972.0	5	2647	7	62.10	6	5.0	15	6496.2	4
0.16	17	28.90	34	41	39	0.9	19	7017.4	22	2023	34	0.00	34	2.3	40	2937.9	38
0.12	24	45.84	15	52	35	0.7	31	8609.2	7	2618	8	17.90	14	1.3	48	2696.3	44
0.08	33	26.88	36	56	32	1.2	16	8451.8	11	2516	11	17.90	14	2.0	43	3910.7	17
0.08	33	14.44	47	18	49	0.6	38	6543.2	29	1635	41	2.00	29	2.5	37	3861.0	19
0.09	30	28.03	35	26	45	0.9	19	6946.5	24	1655	40	4.40	22	2.8	30	4144.1	12
0.06	39	17.72	46	31	44	1.3	13	4038.0	49	1940	36	0.00	34	3.1	26	2494.4	45
0.16	17	118.46	1	1004	2	0.9	19	6075.3	38	2459	15	31.60	9	3.6	22	2799.1	42
0.27	4	100.15	2	561	3	1.9	6	8505.2	9	2801	5	202.70	1	10.6	7	5555.2	6
0.23	6	33.12	28	55	33	0.6	38	6507.7	31	2128	31	2.70	28	4.9	16	3980.7	13
0.25	5	41.34	19	170	15	1.5	9	8798.2	6	2405	17	18.00	13	4.5	20	5528.8	7
0.02	50	20.14	41	66	29	0.8	22	5580.3	43	1142	50	1.20	33	1.7	44	2274.0	48
0.10	28	32.03	29	138	19	0.8	22	8028.4	13	2509	12	4.00	26	2.6	32	3456.8	29
0.08	33	29.45	31	33	43	0.8	22	7173.6	20	2294	21	0.00	34	2.4	38	4668.4	10
0.07	37	37.74	23	22	47	0.6	38	8500.2	10	2569	9	0.00	34	1.4	47	2815.1	40
0.06	39	20.79	39	524	4	0.7	31	5994.7	40	2342	20	0.00	34	1.4	46	2296.5	47
0.20	10	38.12	21	130	20	2.0	5	6044.4	38	2477	14	0.00	34	2.5	38	2446.2	46
0.39	3	18.69	44	237	9	0.6	38	6955.3	22	3159	3	11.80	19	5.0	13	3485.6	28
0.11	26	70.68	3	1631	1	1.1	17	5652.2	42	1608	42	22.80	10	2.7	31	3638.9	24
0.19	13	53.39	8	176	14	1.9	6	12694.1	2	2928	4	110.60	4	26.5	2	9968.3	2
0.09	30	36.29	25	76	26	0.4	45	5559.4	44	1565	44	1.80	31	8.4	9	3515.4	26
0.05	44	44.60	16	48	38	0.2	47	8599.2	8	2526	10	0.00	34	1.7	45	3756.2	22
0.22	7	24.38	38	141	18	0.8	22	6076.5	37	2145	30	13.50	16	4.6	18	3233.9	32
0.22	7	29.00	33	25	46	0.7	31	7477.9	18	2012	35	3.30	27	2.6	32	4013.3	13
0.14	21	42.36	18	57	30	1.6	8	5016.6	47	2348	19	19.30	11	13.6	4	3935.6	15
0.20	10	38.67	20	112	22	0.8	22	8174.0	12	2250	26	9.80	20	6.1	10	6009.0	5
0.12	24	58.47	6	345	7	2.9	2	7511.5	17	2416	16	183.60	2	14.3	3	4994.2	9
0.09	30	19.86	42	36	41	0.3	46	3781.7	50	1357	49	4.20	25	5.3	12	1910.4	50
0.05	44	12.96	48	20	48	0.6	38	11475.2	3	2215	27	0.00	34	0.7	50	3908.7	18
0.08	33	18.90	43	117	21	0.6	38	6292.5	35	1551	45	0.00	34	3.3	24	3045.6	37
0.14	21	36.11	26	101	24	1.0	18	9301.1	4	2037	33	18.20	12	4.6	17	6756.7	3
0.15	20	61.22	4	152	16	0.7	31	5002.5	48	1364	47	0.00	34	4.2	21	2807.5	41
0.16	17	51.60	9	71	27	2.4	3	6837.6	26	2187	28	0.00	34	2.8	29	3757.6	22
0.11	26	29.13	32	433	5	0.7	31	6530.7	30	2267	25	57.10	7	5.2	13	3229.8	32
0.13	23	47.59	13	234	10	0.1	48	5434.2	45	2364	18	12.60	17	10.9	6	3836.7	20
0.06	39	6.41	50	34	42	0.1	48	6355.7	34	1440	46	0.00	34	1.0	49	2112.3	49
0.17	14	50.30	12	41	40	0.7	31	6628.4	28	2286	23	7.40	21	2.5	35	3126.0	36
0.05	44	31.58	30	50	36	0.5	44	7521.1	16	2171	29	0.00	34	2.0	41	3593.3	26

Capacity Data (continued)

	Physical Infrastructure Capacity						Amenities					
	Transportation		Sewage Backlog per capita		Aircraft Takeoffs		Doctors		Arts Approp'ns per capita		Foundation Grants percapita	
	%	Rank	$	Rank	percapita	Rank	100M	Rank	$	Rank	$	Rank
Alabama	1.8	16	203	17	0.08	41	132	35	27.6	43	1.16	48
Alaska	0.0	1	332	28	1.36	1	129	36	800.1	1	3.88	24
Arizona	1.6	14	175	15	0.25	7	179	17	33.1	38	1.85	37
Arkansas	6.9	32	147	10	0.09	38	128	37	41.3	30	1.25	43
California	1.7	15	162	11	0.26	5	234	5	45.6	27	8.13	8
Colorado	14.4	40	46	2	0.25	7	195	12	29.6	41	7.73	10
Connecticut	0.0	1	542	41	0.17	16	260	4	46.9	24	7.84	9
Delaware	6.5	31	447	39	0.19	13	176	18	80.9	12	13.87	1
Florida	5.4	30	263	24	0.26	5	181	16	88.9	11	1.37	41
Georgia	0.4	10	169	13	0.10	35	148	29	37.7	32	4.80	19
Hawaii	0.0	1	355	33	0.17	16	207	8	215.3	4	3.78	25
Idaho	2.8	21	216	18	0.23	10	111	41	13.7	50	1.24	44
Illinois	0.0	1	339	29	0.13	26	194	13	64.8	17	6.05	14
Indiana	3.3	24	360	35	0.08	41	134	34	33.3	37	5.94	15
Iowa	2.8	21	326	27	0.10	35	132	35	18.0	48	1.44	40
Kansas	20.2	43	268	25	0.15	21	160	24	24.2	44	1.23	45
Kentucky	1.9	17	354	32	0.10	35	142	32	42.0	29	3.12	29
Louisiana	2.8	21	220	19	0.16	18	163	23	31.3	40	1.14	49
Maine	8.1	36	765	45	0.11	31	157	26	36.4	34	3.25	28
Maryland	11.0	38	255	23	0.03	50	283	2	43.6	28	4.09	22
Massachusetts	0.0	1	783	46	0.18	14	287	1	282.5	2	12.60	4
Michigan	26.4	47	345	31	0.13	26	167	21	113.4	7	10.17	7
Minnesota	0.3	8	306	26	0.13	26	196	11	66.0	16	13.43	3
Mississippi	18.8	41	196	16	0.04	49	113	40	18.9	47	1.85	36
Missouri	20.2	43	556	42	0.09	38	171	20	137.9	6	4.72	20
Montana	22.2	45	74	5	0.25	7	132	35	92.1	10	1.22	47
Nebraska	0.9	11	108	7	0.11	31	152	28	37.4	33	1.23	46
Nevada	0.0	1	103	6	0.35	3	147	30	19.1	46	1.57	38
New Hampshire	0.3	8	1,027	50	0.16	18	171	20	33.1	38	4.24	21
New Jersey	3.8	26	607	43	0.12	30	204	9	138.3	5	4.93	16
New Mexico	51.2	50	70	3	0.11	31	157	26	50.1	23	2.06	34
New York	1.0	13	829	48	0.07	47	281	3	248.5	3	13.56	2
North Carolina	7.9	35	168	12	0.08	41	158	25	63.8	18	6.41	13
North Dakota	0.0	1	34	1	0.49	2	142	32	36.2	35	2.90	30
Ohio	2.7	20	409	38	0.08	41	172	19	69.8	15	3.64	27
Oklahoma	32.5	48	120	8	0.18	14	129	36	55.2	21	4.87	18
Oregon	43.6	49	364	37	0.20	12	184	14	16.7	49	6.90	12
Pennsylvania	7.0	33	363	36	0.08	41	200	10	56.5	20	10.21	6
Rhode Island	23.3	46	784	47	0.15	21	213	7	46.2	26	10.96	5
South Carolina	10.9	37	222	20	0.07	47	138	33	78.8	13	1.94	35
South Dakota	7.7	34	136	9	0.14	24	121	38	39.6	31	2.16	33
Tennessee	12.0	39	358	34	0.09	38	163	23	76.7	14	3.93	23
Texas	4.4	28	171	14	0.16	18	154	27	58.0	19	7.40	11
Utah	3.6	25	228	21	0.11	31	164	22	96.1	9	1.50	39
Vermont	2.2	19	511	40	0.14	24	222	6	46.3	25	4.88	17
Virginia	4.3	27	232	22	0.08	41	183	15	34.6	36	3.66	26
Washington	1.9	17	664	44	0.29	4	184	14	51.4	22	2.89	31
West Virginia	20.0	42	975	49	0.15	21	143	31	108.5	8	0.60	50
Wisconsin	4.9	29	344	30	0.13	26	167	21	24.2	44	2.58	32
Wyoming	0.9	11	70	3	0.22	11	120	39	28.3	42	1.29	42

Please refer to *Capacity Data*: Tables and Sources and the Capacity Index for further detail on individual variable measures.

Policy Index Data: Tables and Sources

Subindex One: Improving Governance and Regulation

- *Improving Government Foresight*
  Participation in CSPA's State Scanning Network, 1986.
  Source: Council of State Policy and Planning Agencies, Staff Interview, 1986.

- *Conducting Strategic Audits*
  States Which Have Conducted Strategic Audits, 1985.
  Source: National Governors' Association, "State Economic Development Profiles," Washington, D.C., Unpublished, November 1985.

- *Regulatory Review and Reform*
  States With One-Stop Permitting Systems, 1985.
  Source: Small Business Administration, Office of Advocacy, *Directory of State Business Issues: Looking Toward the Future,* (Washington, DC: S.B.A, October 1985); Small Business Administration, Office of Advocacy, "State Small Business Activities," Updated, Unpublished Table, 1986.

- *Creating a Development Cabinet*
  States With Development Cabinets, 1985.
  Source: National Governors' Association, "State Economic Development Profiles," Washington, D.C., Unpublished, November 1985.

- *Improving Oversight*
  States with a Legislative Audit Offices, 1985.
  Source: National Conference of State Legislatures, "Legislative Program Evaluation in the States," Testimony by Rich Jones to the Joint Committee on Program Evaluation, Salem, Oregon, March 31, 1986.

Subindex Two: Creating An Effective And Equitable Tax Code

- *Tax Climate*
  Business Climate Tax Index Score. Assigned score based on a state's final point total and ranking on the *Business Climate Tax Index.* January 1987.
  Source: The Corporation for Enterprise Development, "Business Climate Tax Index," Literature Review, Economic Climate Project, The Corporation for Enterprise Development, January 1987.

Subindex Three: Mobilizing Capital

- **Reforming Finance Regulations**
- *Statewide Branch Banking*
  States Which Allow Intra-state Banking, 1985.
  Source: Conference of State Banking Supervisors, *Annual Survey of State Banking Statutes*, January 1986, Washington, D.C.

- *Community Reinvestment Act*
  States With Community Reinvestment Acts, 1986.
  Source: National Center for Policy Alternatives, Staff Interview, 1986.

- *Pension Funds*
  States Which Allow Public Pension Fund Investment in Venture Capital, 1986.
  Source: Gini Mitchell, *Social Investing of Public Pension Funds*, Washington, D.C.: National Conference of State Legislatures, November 1986.

- **Insuring Against Risk**
- *Guarantees*
  State With Loan Guarantee Programs, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

- **Creating New Institutions**
- *Quasi-Publics*
  States With Publicly Capitalized Venture Capital Corporations, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.
- *Business Development Corporations*
  States with Business Development Corporations, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

- *Loan Funds*
  States with Government Loans Funds, 1985.
  Source: Urban Institute and National Association of Development Agencies, *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

- *Business and Industrial Development Corporations*
  States with Business and Industrial Development Corporations (BIDCOs), 1985.
  Source: *Directory of Incentives for Business Investment and Development in the United States, Second Edition.* Washington, D.C., Urban Institute, 1986.

Subindex Four: Enhancing Technology And Business Development

- *Creating Research and Development Centers*
  States Financing Research and Development Centers, 1985.
  Source: Minnesota Governor's Office of Science and Technology, Staff Interview, 1986.

- *Establishing Technology Transfer Programs*
  States with Technology Transfer Programs, 1985.
  Source: Minnesota Governor's Office of Science and Technology, Staff Interview, 1986.

- *Establishing Small Business Development Centers*
  States with Small Business Development Centers, 1985.
  Source: Small Business Administration, Staff Interview, 1986.

- *Creating Small Business Incubators*
  States with Small Business Incubator Programs, 1985.
  Source: Mt. Auburn Associates, Staff Interview, 1986.

Subindex Five: Building and Maintaining Public Works

- *Capital Budget*
  States With Capital Budgets, 1985.
  Source: U.S. Government Accounting Office, *Capital Budgeting in the States*. Washington, D.C., July 1986.

Subindex Six: Investing in Human Resources

- **Strengthening Public Education**
- *High School Graduation Standards*

  States With High School Graduation Standards, 1985.

  Source: Education Commission on the States, *Clearinghouse Notes*, Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Teacher Career Ladder Plans*

  States Which Have Established Teacher Career Ladders, 1985.

  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Entrance Testing Certification for Teachers*

  States Which Require Entrance Testing for Certification of Teachers, 1985.

  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *Computer Literacy*

  States With Student Computer Literacy Programs, 1985.

  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- *High School Graduation Testing*

  States Which Require High School Graduation Testing, 1985.

  Sources: Education Commission on the States, *Clearinghouse Notes,* Denver, Colorado, September 1985, November 1985, August 1986; Chris Pipho, "States Move Reform Closer to Reality," *Kappa Special Report*, December 1986, K1-K8.

- **Labor-Management Improvement Assistance**
- *Labor-Management Assistance Programs*

  States With Labor-Management Cooperation Programs, 1985.

  Source: U.S. Department of Labor, Labor-Management Services Administration, Staff Interview, 1986.

- **Transfer Payment Investment**
- *Transfer Payment Investment Efforts*

  Investment Orientation of AFDC Programs, 1986.

  Source: The Corporation for Enterprise Development, "Transfer Payment Investment Index," Economic Climate Project, to be released, 1987.

Subindex Seven: Helping Distressed Communities

- *Supporting Community-Based Development*

  States With Community-based Development Programs, 1986.

  Source: National Congress for Community Economic Development, Staff Interview, 1986.

- *Creating Minority Enterprise Programs*

  States With Minority Enterprise Programs, 1986.

  Source: U.S. Department of Commerce, Minority Business Development Agency, Staff Interview, 1986.

- *Expanding Employee Ownership*
  States With Employee Ownership Assistance Programs, 1986.
  Source: National Center for Employee Ownership, Staff Interview, 1986.

▩ **Establishing Rapid Response Teams**

- *State Rapid Response Teams*
  States Which Have Established Rapid Response Teams, 1986.
  Source: National Governors' Association, Staff Interview, 1986.

- *DOL Project Participation*
  States Participating in Demonstration of Canadian Industrial Adjustment Service Program, 1986.
  Source: National Governors' Association, Staff Interview, 1986.

All per capita population calculations were made by The Corporation for Enterprise Development.
Source: 1985 population, Bureau of the Census, Press Release 12/27/85.

Policies Data

	Governance and Regulation					Taxes		Capital							
								Regulations			Risk	Creating New Institutions			
	Foresight	Audits	Regulatory	Cabinet	Oversight	Climate		Branch Banking	CRA States	Pension Funding	Guarantees	Quasi Publics	BDCs	Loan Funds	BIDCOs
						Rank	Score								
Alabama			X			43	1	X							
Alaska				X	X	37	2	X							
Arizona		X			X	12	4	X							
Arkansas		X				38	2			X			X		
California		X				1	5	X		X	X			X	X
Colorado	X		X	X	X	11	4								
Connecticut			X	X		34	2	X			X	X		X	
Delaware			X			15	4	X							
Florida	X	X		X	X	33	2							X	
Georgia				X	X	26	3						X		
Hawaii		X			X	9	5	X		X				X	
Idaho				X	X	19	4	X							
Illinois			X	X	X	31	2							X	
Indiana		X		X		15	4		X		X	X	X		
Iowa		X	X	X	X	25	3			X			X		
Kansas			X		X	35	2			X			X		
Kentucky			X		X	10	5							X	
Louisiana		X				23	3				X			X	
Maine		X	X	X	X	5	5	X			X	X			
Maryland				X	X	2	5	X			X			X	
Massachusetts		X		X	X	13	4	X		X		X	X		
Michigan		X	X	X		3	5		X	X	X	X		X	X
Minnesota	X		X	X	X	7	5			X	X			X	
Mississippi				X	X	29	3				X				
Missouri	X		X	X		36	2				X			X	
Montana		X	X		X	41	1				X		X	X	
Nebraska	X				X	32	2						X		
Nevada		X		X		46	1	X		X			X	X	
New Hampshire						50	1			X			X	X	
New Jersey	X	X		X		40	2	X			X			X	
New Mexico				X		18	4						X		
New York		X	X	X	X	23	3	X					X	X	
North Carolina					X	28	3	X	X						
North Dakota	X	X				44	-1						X	X	
Ohio		X	X	X	X	8	5			X	X			X	
Oklahoma	X	X			X	39	2								
Oregon		X	X	X	X	30	3	X		X			X	X	
Pennsylvania	X	X	X	X	X	14	4			X			X	X	
Rhode Island		X			X	17	4	X					X	X	
South Carolina		X		X		6	5	X					X	X	
South Dakota			X	X		49	1	X							
Tennessee				X		48	1								
Texas				X	X	46	1							X	
Utah			X		X	27	3	X							
Vermont			X	X		42	1	X		X	X			X	
Virginia		X	X		X	21	3								
Washington		X	X	X	X	21	3	X							
West Virginia		X	X		X	20	4							X	
Wisconsin		X	X		X	4	5		X	X				X	
Wyoming				X	X	45	1			X	X		X		

Please refer to *Policies Data:* Tables and Sources and the Policies Index for further detail on individual variable measures.

Technology & Business				Public Works	Investing in Human Resources							Community Distress Assistance				
					Public Education					Labor	TPI				Rapid Response	
R&D Centers	Tech Transfer	SBDCs	Incubating	Public Works	Graduation Standards	Teacher Ladders	Teacher Testing	Computer Literacy	Graduation Testing	Labor/ Management	Transfer Payments	CDC Programs	Minority Enterprise	Employee Ownership	Rapid Response	DOL Project
	X	X			X		X				2		X		X	
				X							3					
	X			X	X		X				4				X	
X	X	X	X	X			X				1		X		X	
X				X	X		X				5		X	X	X	
				X			X				3		X			
X		X		X			X				5		X	X	X	
		X			X		X				3		X	X		
X		X		X	X		X		X		4	X	X			
X		X		X	X		X				2		X			
X				X	X	X	X				2					
		X		X							1				X	
	X	X	X	X			X			X	4		X	X		
	X		X			X	X				2		X			
X	X	X									3		X			X
X		X	X				X				3		X		X	
X		X		X	X		X			X	2		X		X	
		X	X	X		X	X	X	X		1		X			
		X					X	X			5			X		
	X	X		X	X						5		X	X		
X		X					X				5	X	X	X	X	
	X	X	X	X		X				X	5		X	X		X
X	X	X		X		X				X	5	X	X			
X	X	X	X		X		X				1				X	
X	X	X	X	X			X		X		3		X			
	X			X		X	X				3					
X		X		X			X				4		X			
		X			X	X					1					
		X		X			X	X			1	X		X		X
X	X	X		X	X		X				5		X	X		X
X	X			X			X	X			3		X			
X		X		X	X		X				5		X	X		X
X		X	X	X	X		X				1		X		X	
	X	X				X					2					
X	X	X	X	X						X	4	X	X			X
	X	X				X	X				4		X			
	X			X			X				4			X		
X	X	X	X	X					X	X	4		X	X		
		X		X							4		X			
				X	X		X				2		X		X	
		X	X	X			X	X			2		X			
X				X	X		X				1		X		X	
X	X	X			X		X		X		4				X	
X		X		X				X			3				X	
	X	X		X		X			X		5			X		X
X		X		X			X		X		3		X			
X		X		X			X				4		X		X	
		X				X	X			X	2		X	X	X	
X		X		X	X						5	X	X	X	X	
		X		X		X					1					

Appendix B: Toward a New Economic Climate Index: A Research Note

This index is a first attempt to create a framework for understanding and quantifying the processes and variables of sustainable economic development.

The purpose of this note is to clarify the methodological and research issues and judgments confronted in the process. It discusses, in order, the purposes, theoretical underpinnings, and process for developing the index. It then addresses the general limitations of index-building, specifically considers methodological issues confronted on each of the four indexes and suggests priorities for further research. It does not discuss the reasons why all measures were chosen or why hundreds were rejected. Nor does it discuss specifically the strengths and weaknesses of each measure. Instead, we present the general issues.

Although the index itself is exploratory and the measures at times inexact, the perspective on the nature of economic development that underlies the various measures is not tentative. The fact that CfED's index is still in the process of development does not lessen the need for -- and the usefulness of -- a concrete alternative to the dangerously misleading indexes of business climate currently in use.

This index organizes what we know so that we can make better use of that knowledge. It also identifies what we don't know so that we can begin to gain that knowledge. The fact that this first effort is necessarily imperfect in no way undermines the importance of building from where we are. But building requires the candor that this note is meant to supply.

Purpose of the Research

CfED has conducted research, analysis and investigation designed to answer the following questions:

- What is wrong with traditional conceptions and measures of business climate?
- What are the goals of economic development?
- What are the most appropriate measures of a state's economic performance, consistent with the goals of economic development?
- What are the key dynamics and primary determinants of economic performance in today's complex and changing world?
- What are the most effective state policies for improving economic performance?

The Theoretical Framework that Guides the Development Report Card

A theoretical foundation lies beneath all research efforts. Development economists who propose policy interventions inevitably base their proposals on particular models of how firms grow and how the development process works. These models, whether they are made explicit or remain implicit, guide the choice of hypotheses and research methods and the interpretation of data.

Our index is no different. Behind the measures and the numbers lies a theory about the preconditions of economic development and the purposes of development policy. Our position is based upon two central theses:

- Development, at its core, centers on people. GNP, inflation, income multipliers, and supply/demand curves are all abstractions. It is important to look beyond the charts, numbers, graphs and formulas to get to the basis of production and exchange: people.
- Investments in the talents and visions of ever-larger segments of our population is the key to the long-term health of our economy and ultimately the welfare of our society. This is increasingly true in a world economy where flexibility, resilience, innovation, and speed in adaptation to new trends and opportunities have become fundamental to business success.

The model that derives from these ideas and from our understanding of the development process and determines the four-index structure of the Development Report Card is simple:

- What we seek from an economy is long-term, widely-shared increases in our standard of living (tangible and intangible).
- The economy's *performance* largely results from the *vitality* of the business community, which organizes and manages most economic activity. Business vitality is rooted in competitive edge, diversity, market strength, long investment horizons, as well as the ability of new firms to start up and older ones to innovate and adapt.
- Business vitality springs from effectively using and augmenting the building blocks of development: finance, human skills, technology, natural resources and amenities. We call these development ingredients a state's *capacity*.
- Government *policies* can foster or undermine performance, capacity and vitality, thereby leading to stronger or weaker economic performance.

Given the complexity of the development process, it is impossible to model a state's economic development process with much precision. Because of the novelty of the science and art of development, we cannot set forth a comprehensive econometric model of how various inputs and performance measures relate to each other -- for example, we can't know that by investing so much additional money in education, we will gain a certain percentage in growth; or that with this many more high school graduates, business incorporations will go up by a certain percentage. Moreover, many of the performance measures (outputs) are critical ingredients (inputs) to the development process itself. Improved quality of life, for example, is both a critical input into the development process, since it is an important factor in business investment decisions, as well as a product of earlier development.

Since this is not an econometric study examining the precise relationships between different variables and different performance measures, inconsistencies appear across performance measures, and between each of the subindexes. Our model does not imply that states strong in one area of performance or capacity will be strong in all others. The complexities of the causal relationships within states and the outside world, the differing economic histories and evolution of each state, and the time lags of today's private and public actions make that type of symmetry a virtual impossibility.

For this reason, as well as two others, our present model is largely descriptive and qualitative rather than statistical and quantitative. Much of the data relevant to our theoretical approach is currently unavailable. In addition, we made a conscious decision to focus on the problems and the dynamics we consider most important and decisive, regardless of whether the supporting data is available in precise statistical form. To a large extent, we let our concerns determine our data rather than allow our data to determine what problems to analyze.

Though we have yet to develop a more rigorous economic model, we did have a clear and distinct model of development that informed our work. We believe we have constructed a series of indicators of development ingredients, processes and results that can prove useful to public and private institutions in finding their way through today's largely uncharted economic terrain.

The Development of the Index

This index culminates a long process involving extensive research and analysis. Although, with a few exceptions, no new empirical studies were completed, the research team critically examined the key literature on a range of subjects related to state business climate.

The project began with a critique of the Grant Thornton index, one of the most influential attempts to measure the attractiveness of a state to the business community. This critique addressed the following questions:

- Do states that rank high on the Grant Thornton index outperform lower-ranked competitors?
- How does Grant Thornton determine which factors are most conducive to a positive business climate?
- How are these factors weighted in their analyses?
- How does the Grant Thornton index differ from ones constructed by the Southern Regional Council, SRI International, the Southern Growth Policies Board and Inc. magazine?
- What lessons do Grant Thornton and these other indexes provide for constructing an alternative?

Next, we took a critical look at the literature on both the building blocks of development and the obstacles to economic growth. This required extensive literature reviews on: entrepreneurship, taxation, industrial location, service sector development, high technology, foreign investment, environmental regulation, labor-management relations, workers compensation, human capital, infrastructure, capital markets, plant closings and disinvestment, and more. (See Appendix C.) In addition, we commissioned original statistical research on the impact of unions on state economic growth.

This set of inquiries sought to answer a range of important questions:

- What activities and resources stimulate and support job creation, entrepreneurship, and economic development?
- Do unions, high taxes, environmental regulation, and worker compensation rates constrain the development process, in what way and to what extent?

- What are the roles of financial capital, physical infrastructure, labor force skills, and education in long-term development?

- How do firms make industrial location decisions? What factors are most important to different types of firms in different industries?
- What lies behind the boom in services, high technology, and foreign investment?

- What roles have state governments played in fostering economic development? What has proven effective (or at least promising)?

In conducting this research, we received help from advisory boards representing businesses of different sizes and sectors, labor unions, community groups, economists and state development practitioners. We also drew upon our own extensive experience as state policy consultants in the fields of development finance, economic adjustment, small business assistance, welfare and employment policy, and community economic development.

Finally, we constructed a set of indicators and indexes that captured variations in state economic performance, potential and policy. We have resisted the temptation to construct one quantitative index that would enable us to rank all the states from one to fifty. Although this summary short-hand approach captures the public imagination and proves easy and dramatic to publicize, it also unduly telescopes the very complex process of development into a single ranking system that means little for those more interested in strengthening their state's economy than in capturing newspaper headlines. We chose instead to construct four separate indexes to provide benchmarks for evaluating the separate, but related, dimensions of state economic performance, capacity, vitality and public policy. Though we recognized this would also distort some, grades have the advantage of attracting attention and guiding that attention to these four most important dimensions.

In choosing to develop several quantitative indexes, we are well aware of the pitfalls. To avoid any intimation that we claim more for this research than is fair and appropriate, it is important to address these limitations and caveats in advance. The most important problems can be listed as follows:

Inadequate data

Much important statistical information is currently impossible to gather and present in clean, comparative fashion. For example, we do not know how many "good" jobs were lost in each state and how many "bad" ones were created. Our figures on the number of "working poor" are our imperfect proxy. Indirect sources of data derived from content analyses are used in lieu of solid data on entrepreneurial culture.

The data were also not consistently from the same time frame. We used the most up-to-date information available. Since the most recent data available for many variables was the end of the year 1985, this was the period used most frequently. However, some of the data, particularly the variables derived from the 1980 U.S. Census, and the 1982 Business Census are slightly more dated.

The danger of extrapolation from short-term trends

Forecasting is always tough. Simply because a trend is established for a time does not mean that it will continue. Many of the variables capture a point in time, either one year or a trend of a short time period. The figures reflect the varying effects of changes in the U.S. economy. For example, the loans-to-deposit ratio in states with large agricultural and energy industries are low in 1985. This is not to say, however, that the banks in these states are generally unaggressive in their lending policies; undoubtedly, slumps in those two sectors stifled lending.

The difficulty of modeling the real world

The real world is a messy place of complex interrelations. It is often difficult to separate cause and effect. For instance, an unemployment problem in a state may stem from a single "sick" sector. The rest of the state economy could be robust and changing for the good. The complicated linkages in society and the economy mean that no statistical measure is completely untainted. To take one illustration: low loans-to-deposit banking ratios may be related to dominance of a large manufacturing firms, such as automobiles, which bring their own financing from large out-of-state finance institutions. Some measures can be applied only to select states. Inevitably, the data contains a lot of "noise," making definitive conclusions difficult and often dangerous.

The problem of time frame

Traditional economic theory has trouble figuring out when the short-run ends and the long-run begins. How long is the long-run? Cause and effect have varying and lead and lag times that are hard to discern. How long should we wait before we evaluate the effectiveness of policy interventions? How fast can we expect improvement in a state's economic performance as a result of intervention? How long must an economy be in the doldrums before it is clear that its problems are structural, chronic and long-term?

States function in a larger economic context

States differ greatly in their industrial structures. At times, this creates anomalies in comparative analysis, penalizing some states and rewarding others. These structural variations also lead to differential impacts on states by the national and global economies. Thus, a state could pursue sound economic policies, but have its impact undermined and negated by forces beyond the control of state private or public actors and institutions. Hence, measuring the effectiveness of policies or blaming state performance on state policy-makers can be risky.

States are composed of smaller regional economies

There are a host of differences within states. State economies usually comprise a cluster of smaller regional economies. Consequently, statewide measures frequently distort economic conditions in different parts of the same state. Thus, any statewide number we identify as important should be looked at more closely to see if it is really a characteristic of the state as a whole.

Qualitative measures

An index underplays the importance of qualitative factors that cannot be adequately quantified. This is a particular problem in the area of economic development, since so much of what is important to success can not be measured. How does one measure quality of life? The quality of public management? The quality of private sector managers? The attitudes of the financial community?

The problem of ranking

Finally, serious difficulties arise in trying to assign the proper weights to different factors, and in attempting to rank-order the states. To begin with, there exists no commonly agreed-upon, statistically-derived model that can be used as a blueprint for analyzing state economic development. What are all the factors that drive economic growth? Can they be isolated? And can correct weights be assigned to each? For instance, would "x" more dollars in education and training investments lead to more growth that the same amount of investment in physical roads and bridges? It is almost impossible to know.

Index Construction

We attempt to set forth the construction of the four indexes here. The first three indexes are similar in that they group numerical data. Our approach in developing them was also similar. It is discussed in general below, and then specifically for each index. The construction of the policy index was significantly different, and is discussed by itself.

Each of the numerical indexes is based upon a series of subindexes. The number of subindexes which form a final chapter index varies. The Performance Index has five subindexes -- income, employment, equity, quality of jobs and quality of life. The Vitality Index has two subindexes -- competitiveness and entrepreneurial energy. The Capacity Index has four subindexes -- human capital, financial resources, infrastructure and amenities. Each of the indexes and subindexes are categories crafted on the basis of the determinants of economic development we analyzed in our literature reviews.

The subindexes are created from the individual variable measures like life expectancy or the unemployment rate. Each subindex has between two to six data variables. The method of deriving a subindex score is as follows:

- Variable data (the "score") was collected for each state. The best score received a ranking of 1. When a tie occurred, both states received the same ranking. The next state then was ranked as if a tie had not occurred. For example, if the two best ranking states had identical variable scores, they both received a rank of 1, and the next state was assigned a rank of three.

- To compile a subindex, each individual state's rank for the variable measures were all added together. This ranking total is the subindex score. Subindex scores were then ranked from 1 to 50. Ties were treated by the same method as for individual variable measures.

- Creating a final chapter index involved a process very similar to creating the subindexes. State ranks on each subindex were, as in the creation of subindexes, added together. The resulting scores were then ranked from 1 to 50.

Thus, the final index is composed of the rankings from the subindexes rather than the rankings of each individual data variable (such as life expectancy). We were satisfied that the subcategories were of equivalent importance; we were not convinced all the measures had equal importance.

Assigning weights within each index to subindexes (for example, equity, income, etc.) is at this time largely arbitrary. We felt that the simplest and least potentially misleading technique would be to assign equal weights to subindexes in two chapters, performance and vitality. For example, in the performance index there are five subindexes. Therefore, each subindex has a weight of 20 percent. Here, we thought that the goals of development were well represented by weighing each objective equally, while in vitality it also seemed that entrepreneurial energy and competitiveness were equally important to growth. Individual data measures, consequently, have different effective weights, depending on the number of variables which compose a subindex.

In the Capacity Index, the human capital subindex was assigned a weight of 50 percent. This seemed to be a valid conjecture given the comprehensive nature of the measure, including everything from high school to high tech, and given the research by Edward Denison and others on the considerable effect of human capital improvements on economic growth between 1929-1982. Due to the importance of a state's wealth and investment, the financial resources subindex was weighted at 25 percent, while the other two subindexes -- infrastructure and environmental amenities -- were assigned weights of 15 percent and 10 percent, respectively. Infrastructure was weighted more heavily since the development literature is much clearer on the degree of impact that a good infrastructure has, than it is on good amenities; for both subindexes, the quality of the measures was less than we would have liked, and therefore weighting was slighter than it might otherwise have been.

I. Performance

Methodological Issues

Since economic development is fundamentally a matter of choices, of values, and of vision, much of the controversy over growth and job creation options is muddled by the failure to clarify what we hope to achieve. This is an intrinsic problem of most policy developed in the name of economic development. Policy-makers in particular often fail to ask such important questions as: Who do we want to help? Do we care only about creating jobs, or do we also care about what types of jobs are created and who gets them? Do we care only about expanding income and wealth, or do we also care about the distribution of that income and wealth? Should development encompass concerns about the quality of life?

To answer the preceding questions, we define performance broadly to encompass the many goals that our society is trying to achieve. These measures were chosen to sharpen and focus debate in the field on these goals. We sought to clarify that the ultimate purpose of economic development is to improve the quality of life of all of the citizens of this nation. We constructed our measures accordingly. They are designed to capture differences in economic well-being, quality of life and distributional equity; that is, to measure the performance of a state's economy in reaching the goals of a richer and better life for all the state's residents.

The performance measures were chosen to provide a sense of both overall economic performance and measures of equity and quality of life. There are two major methodological limitations with the performance measures:

- To get a real sense of the overall level of economic well-being, per capita income figures should be controlled for the cost of living in an area. For example, to maintain a middle-class standard of living in some states will cost significantly more than in others. Unfortunately, most cost-of-living data is collected only for metropolitan areas, and there is wide divergence in cost of living within each state (for example, compare the cost of living in the New York metropolitan area with that of Buffalo).

- Quality of life, one of the most important performance measures, is extremely difficult to quantify. We tried to locate measures based on public opinion surveys of how people perceived the quality of life, on the assumption that in many ways perception is reality in this area. However, we were unable to locate adequate studies that separated data by state. A comprehensive quality of life index also should include innumerable measures, covering everything from the cost of housing and the quality of health care to the climate and level of physical amenities. To adequately cover this issue would require a book in itself.

Further Research

Obviously, states that come up short on some of our performance measures need to look deeper and see better the shape of the problem. Is the problem of unemployment concentrated in certain sectors, occupations, or regions? Do a state's unemployed share common problems or barriers? Or, do they differ greatly and systematically by skills, race and gender? By examining more closely these sorts of questions, policymakers and researchers should better understand the causes and scale of their development challenges.

Research is needed in other areas as well. There has been an ongoing debate about the meaning of unemployment figures. We know from other studies that these numbers both under- and overestimate hardship. Better methods of measuring and assessing employment and unemployment-based distress are desperately needed. The issues of underemployment and job quality also require further analysis. We know that the number of "bad" jobs seems to be growing, but we do not know what the patterns are and the reasons for any of these on a state-by-state basis. Likewise, we lack solid figures on the number of dislocated workers and plant closings in each state. And despite the growing evidence concerning the role a state's amenities can play in promoting development, we possess only poor methods of measuring it on a statewide and substate basis. Income figures are old (1980 or 1982). We would have liked to include a measure of women's wages as a percentage of men's, which we consider an important equity measure in this economy, but felt the data was too old to be very helpful.

Finally, we need measures to control for the cost of living in an area. For example, the high per capita income in the state of Alaska may be a reflection of the high cost of living in that state rather than the well-being of the residents.

II. Business Vitality

Methodological Issues

The goal here is to identify and measure the relative health of firms at different points in the business life cycle, that is, start-ups, expansions and mature firms -- and to measure the regenerative capacity of the economy through the levels of self-employment and business ownership among groups often excluded from the economic mainstream.

These measures, more than many others, reflect the existing industrial structure in the state. For example, data on capital expenditures per industrial worker only include the manufacturing sector, and, here, are biased towards states with capital-intensive industry. Since this data is only available through the Census of Manufacturing in 1982, it is also dated and reflects a period of severe economic downturn in many states.

Incorporation and self-employment rates provide a sense of the amount of new enterprises being developed and the entrepreneurial activity in a state. However, be aware that many professionals (for instance, doctors, dentists and therapists) have incorporated for tax purposes, and thus incorporation rates could reflect the level of professional employment in a state. To deal with these problems, we instead used business formation data from *Inc.* magazine based on the work of Cognetics, Inc. Yet this data also has flaws, because it is based ultimately on Dun and Bradstreet data, which is not collected for research purposes and is of uneven quality.

Four variables that were important to the vitality measure were left out because of data collection problems. First, the level of local ownership in the economy was not included. Previous research has provided evidence that locally owned firms are more committed to their communities and more likely to sustain themselves during economic downturns. One can presume that a state whose economy is characterized by locally owned firms as opposed to branch plants, would therefore have a more stable and vital business community. We were unable, however, to uncover usable data on this issue.

The second variable excluded was the level of diversity in the economy. The assumption here was that states that were overly dependent on a few industries would be more vulnerable than those with more diversified economies. In a sense, diversity could be used to measure the long-term competitiveness of the overall economy. Although various researchers have tried to develop statewide diversity measures, none were found to be suitable for the purposes of this project.

Third, although we believe that productivity is an important measure of an economy's competitiveness, we found that statewide measures fail to account for differences in industrial structure and would, therefore, be very misleading.

Fourth, the keys to remaining competitive in the new economic environment involve the ability of larger and more mature firms to adapt to change and innovate, both in the development of new products and new production processes. Although some measure of this is included in the capacity sections (for example, patents per capita) these inadequately reflect the importance of innovation to competitiveness. Other useful measures that were available on a state-by-state basis and that reflected innovation by industry were not identified.

Further Research

Business vitality is an important, but somewhat elusive, subject. For instance, the job creation by firm size data used in our study is based ultimately on information collected by Dun and Bradstreet. The data on each firm is not acquired for the purpose of research; hence, it appears marred by a pattern of errors that prevent it from being the ideal data base for measuring the amount of jobs generated by big and small firms. Though researchers could tap ES 202 data collected by the Employment Service of the U.S. Department of Labor to construct an alternative data base, issues of confidentiality restrict use of this data source.

Some would argue that business vitality measures focus excessively on the entrepreneurial, innovation, and business formation aspects of development at the expense of concern with the job loss and generation of high-quality jobs. Yet other researchers and policymakers could argue the opposite. They would say that there is a natural process of firm decay and job loss, and the best way to deal with it is to increase the number of formations and let the natural process of firm growth replace the loss of jobs; over time, as some of these enterprises grow, job quality will improve as well. To date, there is no way of resolving this debate.

It is also necessary to find new ways to appraise the robustness and vitality of large firms. Adoption rates of new technologies and innovation audits that separate out state characteristics are two measures we looked at that might, with time and effort, be developed into usable means.

Finally, we need to better understand the contribution of an "infrastructure" for development in poor communities. A measure of the extent of community development organizations and the like might be in order.

III. Capacity

Methodological Issues

These indicators measure factors essential to achieving the goals of shared and sustainable growth. The index evaluates not only the stock of resources in a state, but also how well the state's resources are used. Measures of human resources, financial resources, physical infrastructure and amenities are included.

In all of these measures there were shortcomings in trying to measure quality of resources versus quantity. This was particularly true in the case of human resources. It is one thing to say how many people in the state received a high school education; it is quite another to compare the quality of that education. Vast differences in quality do exist from state to state. While some analysts often use average ACT and SAT scores to analyze quality issues, we found this inappropriate, since comparisons can not be made between all states (22 state offer ACT and 28 states SAT). In addition, these scores reflect largely the work of college bound students -- and thus, to a great extent, they represent only one demographic group.

The other limitation to the human resource measures is that the most up-to-date information on the educational attainment of the existing labor force is from the 1980 Census. This information is now very out of date, and new information will not be available for some time.

In terms of financial capital there are at least three important limitations. First, there are serious data limitations. Although the Federal Deposit Insurance Corporation requires that all commercial banks report the amount and type of loans they make, they do not require that banks report *where* they make these loans. In some states, commercial banks may have a relatively high level of commercial and industrial lending; but given the increasing mobility of capital, many of the borrowers can be located in other states. Second, the environment of the financial markets differs from state to state. In some states, there is a generally aggressive culture, with investors and bankers willing to take risks. In others, there is a more reserved, conservative approach to the lending process. Capturing this culture is very difficult through a few quantitative measures. Third, there is no reliable data on the availability of critically important "informal" seed capital.

Although studies have showed the importance of physical infrastructure to economic growth, there is an amazing lack of information of the nation's physical infrastructure. Problems in measuring the quantity and quality of the infrastructure around the country is an issue of increasing debate and concern. Although data on expenditures for roads and bridges, and the quantity of paved highways are available, these were not used because they so closely reflect the size and geographic conditions in a state. In addition, measures of the "new infrastructure" for development (for example, telecommunications) are also important.

Further Research

A number of major nonprofit and governmental organizations are updating education statistics to obtain better information regarding the quality of instruction. Their efforts should be strongly supported and we eagerly await the new data.

Efforts to quantify quality of life were introduced as early as 1929, but most of the development of the concept as a body of knowledge resulted from research by the federal government between 1960 and 1976. Since 1980, though, little new research has been conducted. As a consequence, statistical quality of life compilations on a state-by-state basis are scarce. Researchers should search for new measurement tools, especially in the areas of health, arts, nonprofits, charitable activities and the environment. In addition, better theoretical work on the role of amenities in growth and improved measures of subjective satisfaction are needed.

Finally, developing better measures of availability and utilization of capital at critical points in the firm life cycle are important.

IV. Policy

The Policy Index is different from the others. It measures the presence or absence of critical programs, and is, therefore, in large measure, a level-of-effort index, rather than a numerical measure of quality. The index assesses the public sector's level of activity in encouraging and promoting sustainable development. It considers overall governance, human resource policy, financial regulation, public development banking, infrastructure investments, tax policy, distressed area policy and the quality of services to businesses. Obviously other policies have an impact on economic development, but these have the most direct influence. The following explores the evaluation issues that arose when devising these measures.

Difficulties in Establishing Performance Standards

What programs are best equipped to meet our development needs? And what are the standards for judging the performance of various programs?

These are tough questions, without easy answers. A legion of difficulties make it difficult to thoughtfully and easily appraise whether a government program is doing its job. The central dilemmas are:

- *The Data Base*

Adequate and accurate longitudinal data is essential for effective evaluation. Often the required information is not collected on a systematic basis, is incomplete, or is not comparable to data collected elsewhere. In addition, the data on many programs often is not collected by disinterested, outside parties; that is, there often is no corroboration from outside sources. This raises the issue of reliability. Moreover, many programs that appear to be both innovative and promising are often so new that there is a complete lack of data.

- *The Problem of Outcomes vs. Impacts*

In evaluation research, "outcomes" usually refer to short-term results of programs, such as jobs created or wages paid or level of education achieved. "Impacts" usually refer to longer term results, including lifetime earnings. Ideally, a researcher concerned with whether a program contributes to sustained economic development should focus on "impacts." However, impact assessment requires more sophisticated controls, data, and longer time frames than were available to us. Constraints on both time and resources, as well as data availability, often force researchers to focus on "outcomes."

- *The Problem of Prediction*

The complex factors involved in social problems and their causes nearly defy totally accurate or complete explanation. For example, a given program may successfully equip individuals with the skills necessary for adjusting to a changing economy and increasing their economic well-being, but a change in the business cycle or the extinction of the program itself can wipe out this progress. Hence, predicting future success of programs or explaining past failures is problematic, given difficulties in accounting for external environmental forces.

- *The Problem of Attribution*

Social science has yet to find an accurate way to attribute a particular change to an organization or program. In other words, in assessing programs it is worth remembering that establishing direct cause-and-effect relationships remains extremely difficult.

- *The Problem of Measurement*

A central dilemma of research is deciding what to measure. Current literature suggest a number of items, including inputs, process, direct effects, indirect effects, net effects, and impact. Some may be easier to measure than others; in any case, they may not always tell us what was specifically accomplished.

- *The Problem of Standards for Performance Measures*

Determination of the standards through which programs are measured are at the heart of evaluation and criteria construction. Different functions probably will require different measurement standards. Options include measurement against legislative goals, organizationally determined goals, cost-effectiveness criteria, management efficiency and development objectives. Thus, analysts must be careful to specify not only which functions are being measured and at which level of the economic development process, but also what standards of performance are being used. Equally important, the same standards may not be applicable to all programs and activities. When dealing with activities directed toward reducing poverty, we must use different criteria for success than, say, address the problem of university-business technology linkages. Since most community development corporations, for instance, operate in an environment characterized by failure and tremendous business barriers, it is unreasonable to expect immediate and dramatic success. Finally, it may sometimes be necessary to judge programs according to well-developed theoretical guidelines, particularly when data is difficult to obtain.

- *Policy Lags*

It takes some time before the effects of government programs are known. For example, efforts to turn around a declining Midwest community long dependent upon a traditional economic base will not succeed or fail overnight. Premature appraisals of programs whose intent is long-term in nature will present misleading results.

- *Novelty*

Most of today's government initiatives in the development field are of very recent vintage. Few have been operated more than five years. Most are based on earlier precedents that are not much older. Given the novelty of this entire area, the jury remains out on many of these strategies.

- *Different States, Different Needs*

Often government programs are appraised with no attention to whether the tool is appropriate to the state's problem.

Resolving the Problems

Despite these difficulties, several promising developments await. The empirical and theoretical literature in economic development has grown rapidly in recent years. A great deal of evidence exists that begins to establish some of the conditions for certain types of investment decisions, some of the reasons for the growth of such new sectors as high-tech services, and some of the barriers that may hold back an area's development potential. Much of this literature, along with the recent evaluations of longer-running programs, suggests types of policy strategies and program options that should be explored.

In addition, we can establish some useful screening criteria to help us sort through the enormous variety of programs that states are currently implementing. For example, in examining the state record, we tried to apply the following standards:

- *Magnitude of Outcome:* The best programs should have a significant impact on some measurable outcome -- or, at the very least, suggest the possibility of having such an effect. The actual outcome could be measured through such indicators as the number of jobs created, number of trainees placed, percentage reduction in dependency.

- *Leveraging:* All other things being equal, the more private and other public funds leveraged, the better the program.

- *Cost-Effectiveness:* The best programs should utilize resources in an efficient manner. The cost-effectiveness of a program might be gauged by outcomes as cost per unit of output -- for example, the cost per person trained, etc.

- *Long-Term Impact:* The best programs should have a long-term impact -- such as making a lifetime change in a person's earnings ability or equipping them with the skills necessary to adjust to a changing economy, or developing university-government partnerships with the potential to have a durable impact on the direction of regional economies.

- *Effect on Equity:* Programs that purport to contribute to shared economic growth should be assessed in terms of equity outcomes. Specifically, the outcomes of such programs should be shared and should not be regressive in nature.

- *Ability to be Implemented:* The best programs should be relatively easy to understand and implement. Excessively complex programs are bound to suffer from both lack of public support and implementation difficulties.

- *Impact on Barriers Impeding the Economic Development Process:* Programs should be assessed in terms of the degree to which they address key barriers to economic development. This strategic dimension is quite important. For instance, capital market imperfections often make it difficult for various communities and individuals to become involved in the economic development process.

- *Ability to Empower Communities and Individuals:* Enabling communities and individuals to effectively shape the economic development process is another performance standard by which some programs can be assessed. Such programs might take a wide array of forms, ranging from tenant-managed public housing to comprehensive support to community development corporations.

- *Political Pragmatism:* Some programs can be assessed in terms of whether it is politically feasible for them to be fully implemented.

- *General Applicability:* Given the purpose of this index, it is crucial to focus on categories of programs that were generally appropriate to all states. In contrast, the specific ways of, say, leveraging private investment, will differ greatly from state to state. In addition, we focus on policy areas that showed a responsiveness to the changing conditions and challenges of today's economy and that tried to build in a tolerance and openness to these new circumstances.

Obviously, not every program measure we evaluated received high marks on each of these. For example, successful university-business partnerships to develop new technologies do little to expand economic opportunity. Likewise, limited efforts to support neighborhood organizations in low-income inner cities will have no known effect on changing our trade balance. Yet both of these types of efforts are crucial pieces in a comprehensive state development policy mosaic, and both play a role in fostering shared and sustainable increases in quality of life.

Selecting the Policy Areas, Picking the Measures.

The following policy areas were selected:

- Improving governance
- Mobilizing capital for business development
- Developing new businesses and new technologies
- Building and maintaining public works
- Investing in human resources
- Helping distressed communities
- Creating an equitable and efficient tax structure

In each case, we organized the discussion in this fashion. We began with an examination of why it is important. Next, we laid out the major objectives of this policy category. Following this, we discussed the policy direction that states might undertake to address the objective, as well as the specific measures. The measures were particular programs for which there was some evidence of effectiveness. We did not appraise the quality of programs in each state, but instead simply identified whether or not those programs existed. No subindex scores were used in this index. An index was constructed by adding up the number of programs in all areas, except for taxation and transfer payment investment (TPI).

For transfer payment investment and tax policy, many more dimensions were considered. We instead converted the final ranks from individual TPI and Business Climate Tax Indexes into five levels, running from top to bottom. The top scorers got five points, while each successive grouping received one less point. We then added these points to the other program initiatives.

Further Research

First, we would like to add to our policy index the role state policies play in investing in and maintaining the natural resources base. Agriculture policy, forestry, fishing, outdoor recreation, and environmental programs, would all be examined.

Second, measures of program quality, not just program quantity, should be developed.

Finally, the difficult issues of state governance need more attention. For example, important criteria for evaluating state legislature effectiveness and capacity used in a major 1978 study could be replicated. Likewise, a direct survey of state gubernatorial planning, budgeting, management and evaluation practices would give us much greater information than currently is available.

We are happy to respond to questions about the strengths and limitations of specific measures, the reasons we chose these measures and rejected others. We would also be delighted to receive suggestions for better measures.

Appendix C: Literature Reviews

Though developed for internal consumption, CfED has conducted eighteen literature reviews during the initial research phase of our Economic CLimate Project (of which the *Development Report Card* is a part), several of which have been or will be published in the coming months.

- *The Role of Taxation in State Business Climate.*

This review covers the following subjects: the role of different business investment decisions in job creation; major factors in the business location decision; the potential effects of various major state and local taxes; the relative size and variation of state and local taxes; evidence from survey studies, interregional and intraregional econometric studies, and simulation studies; and the indirect effect of taxes on population movement.

- *Business Location and State Personal and Corporate Income Taxes: Arguments Pro and Con.*

This review evaluates the pro and con arguments involving: investment tax credits, R&D credits, targeted industry credits, capital gains, loss carry-forward and -back, the accelerated cost recovery system, and unitary taxation.

- *Unions and Productivity.*

This review surveys a wide range of articles and reports regarding the effect of unions on productivity, wages, and profits.

- *Infrastructure.*

This literature review looks at the issues involving infrastructure maintenance and investment and economic development, including the size and nature of infrastructure financing needs, the reasons for a decline in infrastructure spending, the link between growth and a sound infrastructure, and the methods of expanding and improving infrastructure investment.

- *Disinvestment: Explorations and Strategies.*

This review looks at the issue of plant closings and disinvestment, including the questions of corporate disinvestment/relocation strategies, the effect on ownership structure on plant shutdowns and relocations, the costs of disinvestment, and case studies of corporate closures and contractions.

- *Business Climate and Industrial Location.*

This survey reviews the most prominent studies of the industrial location decision. It pays particular attention to the question of how location decisions vary by economic sector.

- *The Location of Services: Implications for Development.*

The survey looks at the service sector transformation, the role of services in the local and regional economy, and the reasons for the location of services.

- *The Location of High Tech.*

This review examines the location factors that encourage high technology employment in a region or locality.

- *Foreign Investment.*

The review examines the growth of foreign investment in the U.S., as well as why they invest where they do.

- *Workers' Compensation.*

This survey reviews the history and structure of the workers' compensation system, the effects of its costs on business, and the recent efforts to reform and cut workers compensation costs.

- *Union Density and Economic Growth.*

This original empirical study analyzes the effect of union membership on differential state growth rates.

- *Entrepreneurship.*

This survey reviews the definitions of entrepreneurship, the role of the entrepreneur in development, the effect on entrepreneurship on jobs, innovation and productivity; the reasons for the entrepreneurial event; the effect of different socioeconomic environments on entrepreneurship; and the psychology and sociology of the entrepreneur.

- *Environmental Regulation and Industrial Siting.*

The review surveys whether environmental regulation causes industry relocations and closures, slows macroeconomic growth, or influences new plant siting decisions.

- *Analysis of State Venture Capital Programs.*

This paper looks at how capital markets work and evaluates the information on the effectiveness of new state venture capital funds.

- *Labor-Management Cooperation.*

This literature review analyzes recent articles, reports and books in six major areas: the definition of labor-management cooperation; historical perspectives on labor-management cooperation; current trends in labor-management cooperation; lessons and issues in labor-management cooperations; and public policy, economic development and labor-management cooperation.

- *Business Climate in the Midwest States.*

This review (conducted for the National Center for Policy Alternatives by Mt. Auburn Associates) reviewed press clippings and conducted interviews of public officials in six states (Indiana, Illinois, Wisconsin, Minnesota, Ohio and Michigan) to take a reading of the business climate political issues in a region. The major issues which emerged included: unemployment and workers compensation, utility rates, liability insurance, taxes, welfare, infrastructure, education, hazardous waste, and prevailing wage laws.

- *Capital Markets and Economic Development.*

This survey reviewed the major theoretical and empirical studies of the role of state and national capital markets in economic development.

- *The Role of Human Capital in Development.*

This literature review looks: human capital and economic development, the role of different types of labor force skills, the historic contribution of human capital to growth, and the role of human capital in U.S. economic future.

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